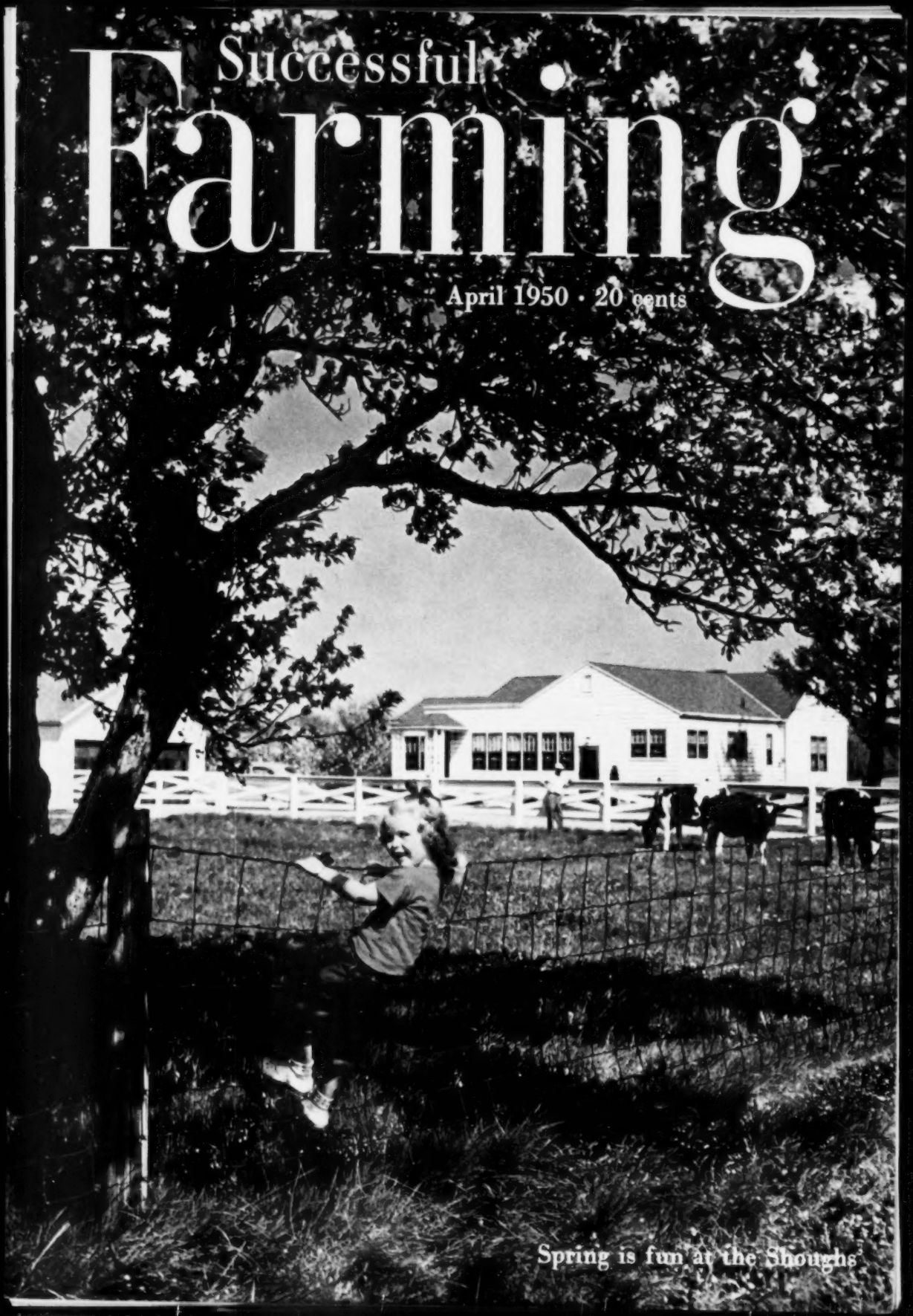
Successful Farming

April 1950 · 20 cents



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How this WEDGE GRIP gives the greatest pull on earth

Super-Sure-Grips pull where other tires won't because these great tires have Goodyear WEDGE-GRIP action with straight-lug bars.

This is it—the Wedge Grip that gives SUPER-SURE-GRIPS the traction and pulling power that no other tire can equal. It's easy to see why. Those big, husky lugs set closer together at the shoulder than at the center of the tread. As a result, the soil is wedged between the lugs while they are in the ground, released when the lugs come free—giving SUPER-SURE-GRIPS the sure, positive hold that means greatest pull. This is in sharp contrast to the way the soil is scattered and sluiced out at the sides when the lugs flare wide at the shoulders, as they do in other tires.

Straight lugs for maximum traction—another important advantage you find in Goodyear tires. Note how every husky Goodyear lug is a *straight* cutting bar, extending straight across the tire's crown. There's no toe-in at the center, no curve to cut down traction. Instead, every inch of every lug pulls equally for its full length and depth, assuring you not only greatest pull, but more evenly distributed wear, *longer* wear.

O-P-E-N at the center. You'll find no hooks, no knobs, no elbows, to blunt the bite of this great tire. That's why Goodyear's O-P-E-N C-E-N-T-E-R design gives sharper, cleaner, full-depth penetration—a soil-holding grip for the "greatest pull on earth"—plus positive self-cleaning *after* the lugs leave the ground. No wonder it's the tractor tire most farmers want—especially since *it doesn't cost a penny more.*

Farmers say SUPER-SURE-GRIPS pull where other tires won't—and they *prove* their confidence in SUPER-SURE-GRIPS by voting them their *first choice* tractor tire! For day-in, day-out work in the fields has shown them that Goodyear's straight-bar Wedge-Grip action gives them the grip and pull they want. They know from experience that it pays to buy the tire of *proved* traction, *proved* longer life and *proved* self-cleaning advantages. Why don't you take advantage of the experience of so many others—get Goodyears and get more for your money.

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Super-Sure-Grip—T. M. The Goodyear Tire & Rubber Company

Wins Two World Championships On Hampshire Barrow

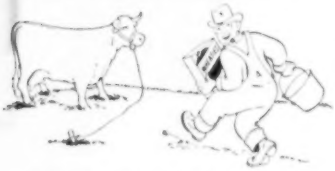
Willard Guckian's Barrow, Lucky, "Tops" At International Exposition

Willard Guckian and Lucky. Willard is another of many Wheaties-eating farm champions. Are YOU getting plenty of Wheaties?

CAMDEN, OHIO—Willard Guckian's Hampshire barrow, Lucky, lived up to its name at the 1949 International Live Stock Exposition. Won two Championships for Willard; was also Reserve Champion Barrow over all breeds!

* * *

Showing hogs is Willard's favorite hobby. But he also raises hybrid seed corn, and is building a Milking Shorthorn herd. Their milk goes fine on Willard's Wheaties! He first tasted these delicious flakes in 1925. Now he eats Wheaties often at breakfast—occasionally at bedtime!



Since 1884, Willard's family owned the land he farms. It's a family habit! Another Guckian family habit: *eating Wheaties.* Same way in *many* homes. Wheaties are America's favorite whole wheat flakes. Second-helping good!

Lots of nourishment in Wheaties, too: B vitamins, minerals, protein, food energy. A famous training dish, served with milk and fruit. Have some! Wheaties, "Breakfast of Champions"!

Extra value with Wheaties. (1) *Silverware coupons in Wheaties and other General Mills products.* (2) *50% more than regular size in Wheaties' Extra-Big-Pak.*

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Successful
Farming
The Dairy Farmer

THE MAGAZINE OF FARM BUSINESS AND FARM HOMES

April 1950 Vol. 48, No. 4

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Are they on the road to college?

EVEN THOUGH your youngsters still take the bus to grade school, it's not too soon to start thinking about whether or not they're on the road to college, too.

You want to send them to college, of course, when the time comes. And, if you live, undoubtedly you will.

But, because there is always the possibility that you may not live to see them through, it's wise to back up your plans for their future education with life insurance.

Then you'll know that even if you should happen to die prematurely, they'll still be able to go to college because they'll have the money to do it.

Providing funds for education is only one of the many ways in which life insurance can help build financial security for your family in the years ahead.

The New York Life agent serving your county will be glad to help you work out an insurance program that will not only protect your wife and children from needless want and hardship, but keep them on the road to the kind of future you want them to have. Why not get in touch with him today and talk it over?

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Farm Outlook

Latest information on conditions, production, markets, and income prospects

Food—more of it, worth less

It works the same, whether it's cars or corn. If production goes up faster than demand, prices come down. There'll be one extra hog in every 10 this year; more eggs, fats and oils, milk, and vegetables, too. Though women buy more as prices go down, sticky middleman costs keep retail prices from falling in proportion to on-the-farm prices. Your share of consumer food dollar is now about 45 cents—smallest in eight years. In 1945, you got 54 cents.

Prices ahead—some up, some down

Don't fear sharp price skids during the rest of this year—unless strikes keep workers off the jobs, thus pulling the props from under their buying power. But even a small price change can wipe out your profits for the year. Expect these changes:

Wheat. Old wheat will sell higher as supply is eaten up. But new wheat will likely sell below supports for several months after harvest.

Corn. Both old and new will sell closer to the loan than in the last two years. This makes it to your advantage, often, to ignore allotments and sell your larger acreage on a market held up by the loans. This won't work next year, of course, if quotas are voted in. Another corn tip: popcorn and sweet corn—unless you use them for ensilage or animal feeding—don't count against your allotment. With a contract, each can be a profitable crop. Without a contract, you might be stuck with the crop. So mind your p's and q's and get the boys on paper!

Soybeans. Old-crop beans will be scarce and high-priced due to big seed demand. New-crop beans will fall below supports, from the weight of heavy 1950 output.

Hogs. This summer's prices for last fall's litters will be lower than the prices you were paid last summer. And hogs from this spring's pig crop will snuggle close to support prices. Keep that in mind while feeding out.

Beef cattle. Lots of folks are rebuilding their herds. This will limit the immediate slaughter volume, should help hold prices.

Poultry. It will be lower than last year, but eggs should do fairly well next fall and winter.

Milk. No startling changes. Will follow usual seasonal pattern, close to last year's levels for this commodity.

Lots of baby chicks

Surprise of the season was the big winter hatchery production. It was the opposite of what you might expect, because: (1) egg-feed price relationships were the worst in 27 years of government records, and (2) farmers earlier had reported intentions of buying 12 percent fewer chicks this year than last. Now, everyone expects baby chick purchases to drop with a thump during the April-June quarter.

Another interesting point in the winter's chick market was a 24-percent increase in the number of chicks sexed this January, as compared with January, 1949. U.S.D.A. also reports farmers expect to increase the proportion of pullet chicks in all regions of the country this year. Last fall, shell eggs actually were scarce for a short time. Prices at retail immediately went sky-high, and housewives just as immediately started feeding their families less eggs. That isn't likely to be repeated this fall.

Long-term food market good

While the short-range market prospects for farm products are uncertain—even being used as a political football—the need for food in the United States will surely expand during the next five years. We're going to have more customers. At least 5 million—and possibly as many as 8 million—people will be added to our population during that period.

Besides having more customers, we may sell more to each customer we already have. Some folks think food consumption per person may go up as much as 10 percent. Provided, of course, city folks have good buying power and food is not priced out of its market. Increased demand will be, mainly, for meat, milk, eggs, and the like.

By 1955—if all goes well—our total consumer demand will require the loins, hams, and bacon from more than 100 million meaty hogs a year; the poultry and eggs from more than our present flocks; and a cattle and calf population of more than 90 million head of beef and dairy stock combined. That's a lot of farm animals!

Watch milk quality

Markets are expected to "clamp down" during the late spring and summer. Rejected milk is expensive cat food, so you will do well to check your barn and milkhouse now and correct any conditions that may cause trouble.

You have less money

If you've had the feeling there's less cash jingling in your pocket, you're right. U.S.D.A. says net farm income for 1949 fell 17 percent below 1948. Cash marketing receipts were 27.5 billion, gross, as compared to 30.5 in 1948. Net income last year was 13.8 billion. That's an average of $763 per person, for all persons the Census Bureau says are "on farms." As you know, this includes a million—some folks say two million—people who are farmers in no sense of the word. They don't produce enough to keep themselves alive, much less any food for city markets. As this group never made much money anyway, most of that 17 percent drop came from the actual producing farms.

Feed prices sag

We have a record feed and grain supply on hand. From early December until March, protein feed prices skidded down. Soybean meal went down nearly $13 a ton on the Decatur wholesale market in one 9-week period.

Demand may pick up a little as the big hatch of chicks starts to eat larger portions. And this spring's pig crop will take another big chunk. But, if prices pick up enough, the government may release some of its cottonseed meal stocks. Outlook for next fall is for lower oil-meal prices, when the new crop of beans hits the market.

Boys are being boys

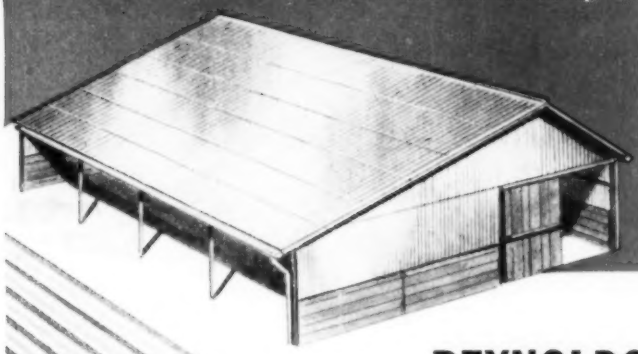
It's your future income that's being tossed back and forth by Secretary Brannan and Allan Kline. No matter which you favor, each smart remark they pass off at each other is a loss for you—it only delays the day when we will have a sensible solution to the farm-price problem.

You might try sheep

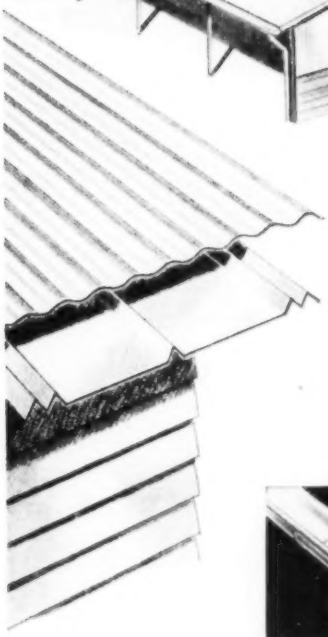
Most folks are shifting to beef to use up extra acres shifted from corn to grass. For some, sheep might do a better job. Two advantages are these: (1) it takes less money for breeding stock, and (2) the cash starts coming back more quickly. Lamb prices have held well for the last two years, and prospects are they will continue to hold. Sheep and lamb numbers are the smallest since the government started keeping records way back 83 years ago. **END**

Ideal beef and dairy heating barn, hay barn, or machinery storage shelter. Excellent for sheep, cows or feeder lambs. Barn pictured is 32 x 60 feet—four 15-foot spans between poles. Length variable by adding extra spans.

Build this low-cost, labor-saving Doane Pole-Frame Barn



with REYNOLDS *Lifetime* ALUMINUM



Corrugated • 5-V Crimp • Weatherboard Siding
Gutters and Downspouts

This pole-frame barn can be built for *half the cost* of a conventional barn. And it *cuts in half the labor* of handling feed and livestock.

You get down-to-earth operating economy from this single-story construction—no "overhead". Hay and bedding, chopped or baled, are stored at ground level—right where they are to be used. Tractor loader removes manure through open side. It's a barn your livestock like and can pay for!

The basic principle of this design is the frame of chemically pressure-treated poles sunk five feet into the ground. The poles serve both as supports and anchors. Excavations, footings and foundations are eliminated. Sawing is reduced to a minimum. Building is almost as simple as putting up a fence—just set the poles and nail the rest.

This type barn, designed and widely tested by the Doane Agricultural Service, is the first of a series of improved farm structures made available through the services of Reynolds Farm Institute. For detailed plans, including directions for construction, list of materials and sources for treated poles, send $5.00 with the coupon.

For rustproof permanence without painting, for fire resistance, corrosion resistance, easier application and radiant heat insulation summer and winter . . . build with Reynolds *Lifetime* Aluminum. Use any combination of the roofing and siding shown, with half-round or ogee gutters. All available in stipple-embossed or smooth finish . . . see your dealer!

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Reynolds also serves the farmer with Aluminum Cable (ACSR), Portable Irrigation Pipe, Siphon Tubes, Paint Pigment and Freezer Foil.

Plans for this barn can be obtained by sending $5.00 with this coupon. Additional information on request.

If you intend to build from U. S. Department of Agriculture drawings, check coupon for FREE set of "Aluminum Adapter Plans."

For any building or repairing, check coupon for FREE 8-page catalog of Aluminum Farm Building Products.

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NOW! PROOF THAT BRUSHING TEETH RIGHT AFTER EATING WITH

COLGATE DENTAL CREAM HELPS STOP TOOTH DECAY!

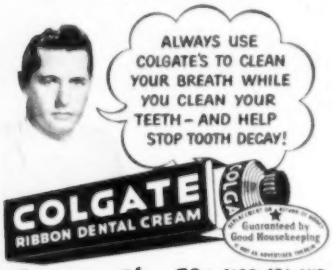
Exhaustive Research by Eminent Dental Authorities Proves How Using Colgate Dental Cream Helps Stop Tooth Decay Before It Starts!

Now, the toothpaste you use to clean your breath while you clean your teeth, offers a *proved* way to help stop tooth decay before it starts! 2 years' continuous research at leading universities—hundreds of case histories—makes this the most *conclusive* proof in all dentifrice research on tooth decay!

Colgate's contains all the necessary ingredients, including an exclusive *patented* ingredient, for effective daily dental care. No risk of irritation to tissues and gums! And no change in flavor, foam, or cleansing action!

No Other Dentifrice Offers Proof of Such Results!

Modern research shows tooth decay is caused by mouth acids which are at their worst right after eating. Brushing teeth with Colgate's as directed helps remove acids before they harm enamel. And Colgate's penetrating foam reaches crevices between teeth where food particles often lodge. No dentifrice can stop *all* tooth decay, or help cavities already started. But brushing teeth with Colgate Dental Cream as directed is a safe, *proved* way to help stop tooth decay!



Economy Size 59¢ ALSO 43¢ AND 29¢ SIZES

THE FARMER'S

Washington

By Richard Wilson

- Relief for industry on imports?
- Accuse Brannan of sabotaging farm act
- Tax-raisers turn hungry eyes on co-ops
- Hint food stamps as surplus solution

Subsidy for imports? A very significant extension of the welfare-state idea is being considered at the top level in the State Department. Nothing is being said publicly about it because it touches a very delicate point: a sizable expansion of imports from Europe.

Secretary of State Acheson and E.C.A. Administrator Paul Hoffman have told Congress that the United States must increase its imports, perhaps by as much as $1,250,000,000 in 1953. But what they have *not* emphasized is that they expect the impact on American business and agriculture to be rather considerable, and that they are prepared to have the government step in and ease the shock of the new competition.

A government relief program for industries hurt by new imports is what is being considered. This will cost money, of course. It will also imply government controls in the damaged industries. The protection once afforded by tariffs will be shifted to protection by some kind of government handout. Planning for this program has not yet gone very far. It will probably come slowly as the complaint against European imports rises in the months ahead.

A voice is being raised here and there against imports. Representative Ben Jensen (Republican, Iowa) has complained that we are importing a good many commodities which are already in surplus. The amounts are small, but include 288,000 bushels of corn; 18,500,000 bushels of barley; 12,000,000 bushels of oats; and 45,480 bags of dried beans. "The free trade policy is hitting directly home, forcing further curtailed production and lower prices," Jensen says.

Sabotage in the U.S.D.A.? Halls of Congress are echoing open and whispered charges that Secretary of Agriculture Charles Brannan is deliberately sabotaging the "Anderson" Farm Act of 1949. He is doing this, so the charges go, by consciously making the Anderson-favored law seem unpopular and expensive. Senator George D. Aiken (Republican, Vermont) has suggested that "there might be a real attempt, a deliberate attempt, to discredit laws which the Congress has passed.

"I believe," he added, "that in the top flights of our Department of Agriculture we now have a political ambition which, if not controlled, will bring the agriculture of the United States crashing down to earth, and probably the whole economy with it—in time."

The specific matter in question is whether the potato program was so manipulated as to reflect in the worst way on the flexible-price-support program he is currently fighting.

It must be said for the Department of Agriculture that it is very sensitive on this point. Brannan instructed his staff to watch carefully for any statement which might give Brannan an opportunity to spike the stories.

But such stories continue, in three general forms. The first is that C.C.C.'s losses on the potato program were unduly "dramatized" (in other words, publicized) by Brannan. Another is that Brannan has permitted costs to go above the necessary level in other price-support programs to show that the Brannan Plan would be no more expensive. And a third charge is that the Secretary of Agriculture acted without justification in declaring unworkable the cotton and peanut acreage allotment provisions under the Anderson Act.

The contest between Brannan and Anderson becomes particularly rough at this point because it is asserted that cotton acreage allotments favored growers of the long-staple type produced in Anderson's home state of New Mexico, and in California.

Furthermore, both Brannan and Anderson are considered by their friends to be rising stars in the Democratic political firmament. It is difficult for one star to rise without casting a shadow on the other. And, at this point in the game, President Truman is clearly on Secretary Brannan's side.

The whole subject is very serious politically. President Truman has to rely on farm-state support to maintain his very slim margin of popularity. Recent rumors have been circulated that Democratic National Chairman Boyle reported to the president that he was slipping among the farmers. The president doesn't like fights in his official family, thinks they hurt him politically.

Another squabble. Watch for trouble, also, between Anderson and Chairman Elmer Thomas of the Senate Agriculture Committee. Thomas is reported smoldering over the way Anderson dominates,

[*Turn to page 15*

IT'S EASY TO SHAPE NEAT, FIRM CIGARETTES WITH CRIMP CUT PRINCE ALBERT!
BILL BENTLEY, SOIL CONSERVATIONIST
WITH ME, THERE'S NO OTHER TOBACCO LIKE CRIMP CUT PRINCE ALBERT FOR SOLID PIPE COMFORT
FRANK WILLBRANT, MAPLE-SUGAR FARMER
I'VE SMOKED PRINCE ALBERT IN MY PIPE FOR YEARS. P.A. IS A GRAND, RICH-TASTING SMOKE
MILFORD GOODERMOTE, CARPENTER
In pipes— In papers—
PRINCE ALBERT
CRIMP CUT
LONG BURNING PIPE AND CIGARETTE TOBACCO
the National Joy Smoke
HAROLD J. BERRY, FEED-STORE OWNER
FOR MILD, TASTY CIGARETTES, I ROLL 'EM WITH CRIMP CUT PRINCE ALBERT
GEORGE FITZGERALD, DANCE CALLER
ALDEN ALDERMAN, ROAD-MAINTENANCE WORKER
I'VE ROLLED MANY A CIGARETTE WITH CRIMP CUT PRINCE ALBERT— IT'S GREAT 'MAKIN'S'!
I FOUND REAL PIPE JOY WHEN I CHANGED TO TONGUE-GENTLE PRINCE ALBERT
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MORE MEN SMOKE Prince Albert THAN ANY OTHER TOBACCO

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Tips you can use today

Farm signs. A complete line of farm signs, ranging from full-color marketing signs to cut-out letters for barns, is now offered. Each sign is personalized and made according to individual specifications.—*Successful Sign Co., Racine, Wisconsin.*

Mouse trap. This automatic trap is designed to catch up to 24 mice at one setting. Mice enter the runway—either as a result of curiosity or a light baiting of flour—and are immediately pushed into the cage end. After the trap is emptied and the mice disposed of, a simple rewinding makes it ready for the next batch.—*Kness Mfg. Co., Albia, Iowa.*

Grease-gun holster. If you are tired of digging the grease gun out of the bottom of the toolbox on the tractor, this holster should interest you. It is designed to hold all popular-sized guns and has 18 mounting holes, so it can be mounted on any make or type of tractor or farm machine. A clamp holds gun tightly to prevent bouncing.—*Kooiker Mfg. Co., Hull, Iowa.*

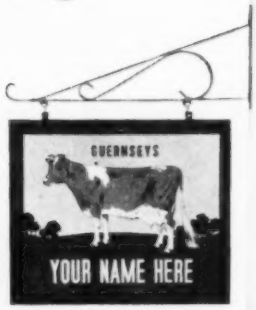
Crib and granary unit. This crib and granary, along with the built-in elevator, are designed and sold as a complete, packaged unit. All the basic materials—laminated rafters, bents, and hardware—are furnished. Instructions are included for building the foundation, and you obtain roofing and siding locally or side with homesawed lumber. A cup-type elevator serves the building. Floors of the cribs are planned to have a tunnel under them—for a drag when emptying the crib or an air tunnel for drying equipment. Manufacturers say it can liquidate its cost in five years of storage earnings.—*G. & D. Mfg. Co., Streator, Illinois.*

Soil fitter. Designed to prepare seed and root beds in a single operation between plowing and planting, the Soil Surgeon features 40 cutting knives to each 4′ section. These knives penetrate the soil to a depth of 4½″, and also make the machine work well for early cultivation jobs, according to the manufacturers.—*Corson Bros., Inc., Indianapolis, Indiana.*

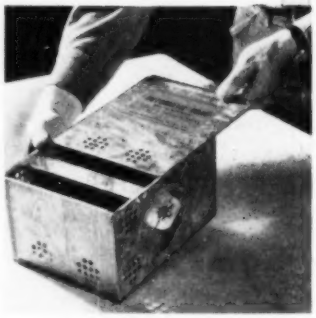
Don't bale wet hay. Baling partly dried hay, then letting it stand in the field to finish curing, doesn't work in Wisconsin, according to University of Wisconsin tests. University workers tried all the variations they could think of, and moisture contents varied from 20 to 50 percent. The main trouble was mold, which developed in three days to a week if moisture was high. A moisture content of 22½ percent seems about as high as you can go and still expect the bales to go safely into storage.

Nitrogen on pasture. Nitrogen top-dressed on North Dakota pastures in 1949 doubled pasture growth in some tests and caused it to be half again as large in others. The doubled production was obtained on a mixed pasture, the other on crested wheatgrass.

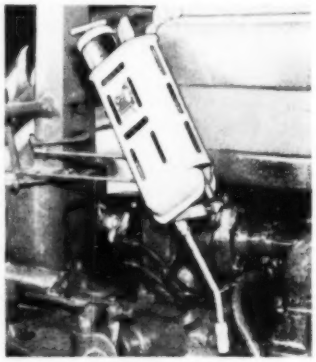
Watch soybean germination. Quotas or no, there likely will be more soybeans planted this spring than were planted last year. And the scramble for seed may get a [*Turn to page 65*



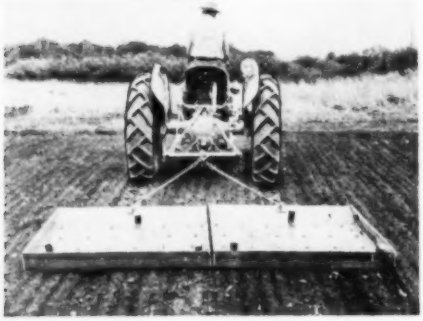
Farm sign



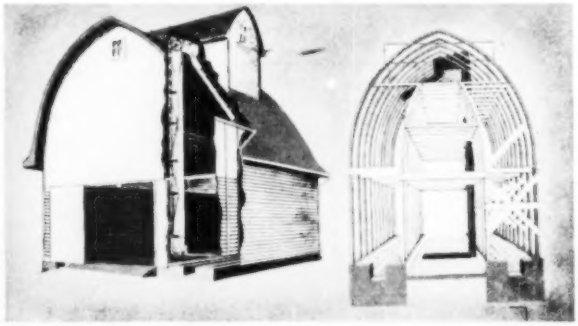
Mouse trap



Grease-gun holster



Soil fitter



Crib and granary unit

You'll like a new Farmall at haying time

Here a Farmall C with a direct-connected McCormick 7-foot mower is mowing at the rate of 35 acres a day.

More than a million farmers say, "You'll like a FARMALL"

Yes, more than a million farmers have bought Farmall tractors . . . far more than any other make. Some have used Farmalls for 25 years. Many have bought *additional* Farmalls to continue their mechanization programs.

These are the men who know the *Farmall System of Farming* best, and they'll advise *you* to choose *your* new tractor from among the five Farmalls.

Right from the first you'll like a Farmall for its quick-starting, smooth-running, four-cylinder engine and for the ease of attaching McCormick implements to do any job the year 'round.

You'll like the easy handling and pin-point turning, the riding comfort, and the fingertip ease of controlling implements with Farmall hydraulic power.

And after you've used a Farmall for many busy years, you'll have still more reasons to like it. For owners find Farmalls always ready to work, year after year, hot or cold, rain or shine. They find that repairs are seldom needed, and that service and replacement parts can always be had from a nearby IH dealer. Those things add up to long life and low cost per year.

Your IH dealer would like you to try out a Farmall *in your own fields*. Talk to him today about a *demonstration*. He'll offer convenient payment terms, too.

mid-century

INTERNATIONAL HARVESTER

International Harvester Builds McCormick Farm Equipment and Farmall Tractors . . . Motor Trucks . . . Crawler Tractors and Power Units . . . Refrigerators and Freezers

FREE BOOKLETS

For full details about the five Farmalls and what each can do for you, send the coupon for any or all of these booklets.

5-STAR SERVICE

See your IH dealer for IH 5-STAR SERVICE . . . better five ways for getting your equipment ready for the work ahead.

International Harvester Company, P.O. Box 7333, Dept. E, Chicago 80, Ill.
Please send me free booklets on:

- ☐ Farmall Cub — 1-plow tractor
- ☐ Farmall Super-A — 1-plow tractor
- ☐ Farmall C — 1 to 2-plow tractor
- ☐ Farmall H, M, and MD (Diesel) — 2-plow and 3-plow tractors
- ☐ I'd like to have a Farmall tractor demonstrated on my own farm

I farm _____ crop acres. My main crop is _____

Name _____

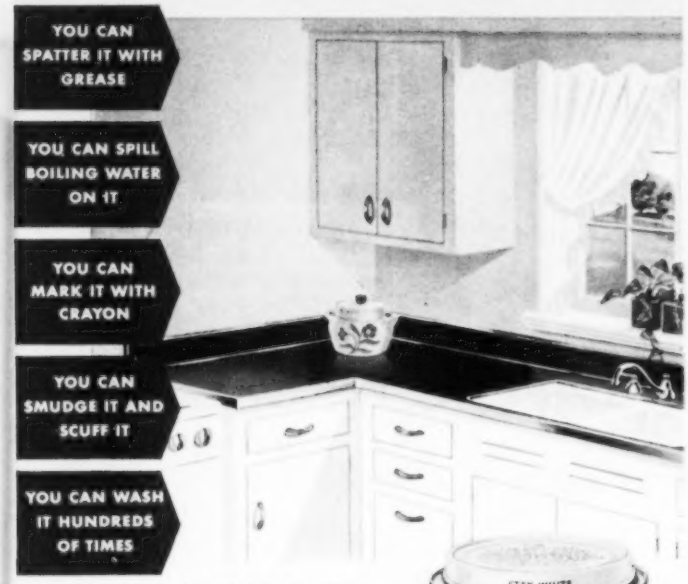
Post Office _____ State _____

My IH dealer is _____

IT'S HARD TO BELIEVE ..*but it's true!*

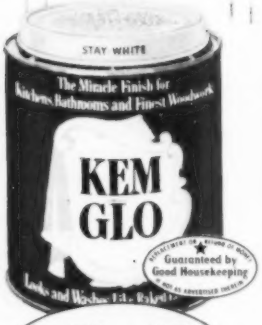
KEM-GLO

looks and washes like baked enamel



The Miracle Lustre Finish for Kitchens, Bathrooms and all Woodwork

Wherever you want beautiful walls and woodwork that clean as easily as your refrigerator, KEM-GLO is your answer. Its tough, plastic-smooth surface withstands grease, stains, scuffs—washes hundreds of times without losing its lustrous beauty. KEM-GLO comes in 10 lovely colors and a white that really *stays white!* Ready to use, easy to apply. One coat covers most surfaces—dries in 3 to 4 hours. Try this new miracle finish—you'll be delighted.



PINT $1.39 QUART $2.39
ECONOMY SIZE $7.98 GALLON

NOW! SAVE 41¢ WITH THIS COUPON:

SPECIAL TRY•A•PINT OFFER

A pint of marvelous **KEM-GLO STAY-WHITE** only **98¢** with this coupon

Take this coupon to your Kem-Glo dealer. Redeemable from April 1 to May 31, 1950 Regular value $1.39

YOUR MONEY BACK IF NOT COMPLETELY SATISFIED

all around *the* house®

Here are tips to help you save yourself some time, steps, and work

● In my home, a century-old coffee mill now leads the life of a jewelry cache. It is admired by all and certainly is as unusual as it is serviceable. I simply lined the little drawer at the base with a soft strip of velveteen and nestled my pearls and assorted costume jewelry into it.—*Mrs. G. B., Oklahoma.*

● **A handy way to care for your garden hose when it's not in use is to coil it in a bushel basket. This is easy to carry from place to place and makes a good storage spot for the hose through the winter.—*Mrs. L. F., Iowa.***

● If you are considering draperies for your bedrooms, try buying colored sheets to match your color scheme. We've used them with most attractive results. One sheet, 81x108 inches, makes a pair of lovely draperies, complete with pinch pleats—and there's so little work and time involved. Curtains from sheets are inexpensive and easily laundered, too.—*Mrs. D. R., Minnesota.*

● **We painted our old-fashioned, gold and blue ceiling light fixtures the same color as our ceiling. It makes them very inconspicuous and lends a surprisingly modern appearance to the room.—*Mrs. J. W., New York.***

● Use a thimble on your finger to rub dried mud spots from clothing quickly,

as illustrated. Then give the garment a thorough brushing with a clothesbrush. —*Mrs. L. W., Iowa.*

● To make drawer pulls, cut an empty thread spool in two, crosswise. Insert a bolt through the center front of the drawer, securing it on the inside with a nut and washer. Paint or stain the knobs to match the drawer.—*Mrs. E. L., Michigan.*

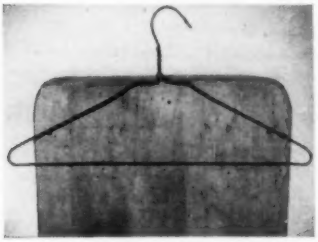
● If you have a modern drawerless sewing machine, you'll find a new tin fishing-tackle box is just the thing for storing sewing supplies. Adopt the kind with an upper tray that lifts as the lid is opened. The small compartments make it extra helpful.—*Mrs. F. S., Pennsylvania.*

● **To remove an old finish from grooved furniture, dip a piece of twine in the remover and seesaw it through the grooves. This makes the job extra easy.—*Mrs. H. K., Minnesota.***

● There's very little drawer space in our kitchen, so my husband built a drawer to fit on the rungs under the seat of our child's high chair. It's a wonderful place to store the little one's bibs and equipment—keeps everything handy for mealtime. A cardboard box works almost as well as wood, too.—*Mrs. H. B., Michigan.*

● **If you wear a clothespin apron while planting your garden, the various seed packages will be right with you when you need them.—*Miss L. L., Indiana.***

● It's easy to hang your ironing board out of the way when not in use, if you staple a wire clothes hanger securely



under the straight end of the board. —*Miss B. S., South Dakota.*

● **An old rubber jar ring glued under our dog's feeding dish keeps the dish from scooting around and saves innumerable upsets.—*Mrs. E. D., Ohio.***

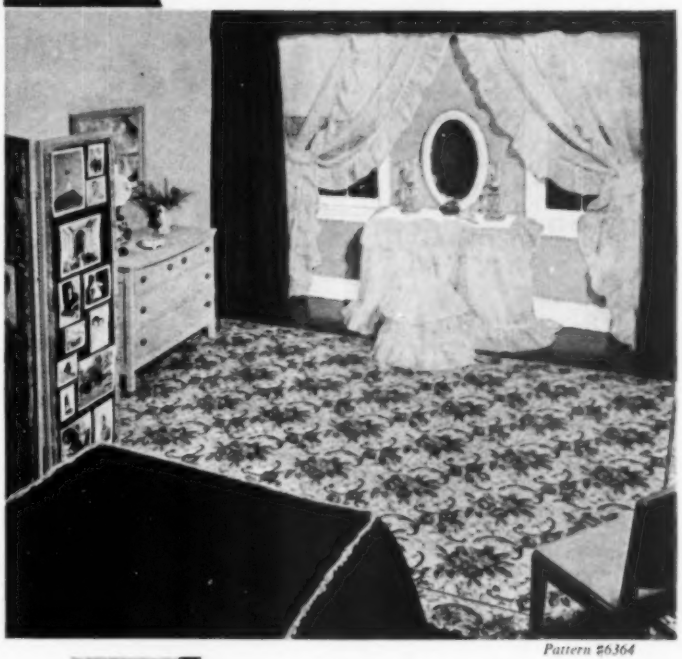
● "Scrubwoman's knee" is no longer a problem for me. I added a 6x8-inch pocket to each knee of a pair of work slacks. Now, while scrubbing or waxing floors or even working in the garden, I simply slip a 5x6-inch rubber sponge in each pocket to cushion my knees.—*Mrs. B. H., Missouri.*

● **Dishwashing time at our house is cut an unbelievable amount by keeping a pan of sudsy water right on the drainboard by the sink. Then, as we use utensils in cooking, we drop them into this pan to soak. This saves all kinds of scouring later when we wash them with the regular dishes. —*Mrs. J. K., Pennsylvania.***

● I converted my baby scale into a handy household scale by removing the bulky curved pan and its support and replacing them with a washer and a shallow square baking pan, punched to take the screw. The smaller pan makes it easy to store away in my kitchen, ready for use in a second.—*Mrs. M. F., New York.*

Successful Farming will pay $5 for each helpful suggestion published. We cannot return unused suggestions.—Editors

Imagine re-doing your BEDROOM for less than $50!



Pattern #6364

Use colors from your Bird Rug for organdy curtains, burlap drapes.

Cover an old screen with green burlap, and hang family pictures lavishly.

Cover chair seats with plastic to match the flowers in your Bird Rug.

"From my bright new Bird Armorlite Rug to my crisp yellow organdy curtains, I spent less than $50!"*

And all dreaming aside, the same thing can be yours by doing the redecorating yourself!

THE starting place, professional decorators say, is the floor . . . and a BIRD ARMORLITE Rug is the best beginning you can make! The resilient enamel surface of BIRD ARMORLITE is made with special resins . . . tough, wear-resistant and easy to keep clean and glossy with mild soap and water! Soft, rich colors; gay, sparkling designs — you'll find them all in BIRD ARMORLITE's many patterns and styles. Bird quality is dependable, too . . . they've made the best in floor coverings for many, many years, and other fine products since 1795!

So . . . start off *right* with a BIRD ARMORLITE Rug! Try these pictured ideas, too — and add to them as you go along. Before you know it you'll have a bedroom right out of your dreams . . . at a price that won't haunt you!

Practice redecorating all your rooms right in Bird's "Color Schemer" — just 10c. Write to address below or see your nearest Bird dealer.

*2 pair organdy curtains, about $4.00; 6 yards burlap, about $5.00; 1 pint enamel paint, about $1.00; 1 gallon wall paint, about $5.00; 2 yards plastic, about $8.00 . . . add the cost of your BIRD ARMORLITE Rug (from $5.95 to $14.95, depending on size and geographical area) . . . you're still under $50!

BIRD Armorlite and Linoleum

FLOOR COVERINGS

EAST WALPOLE, MASS.

BIRD & SON, INC.

Also Manufacturers of Famous Bird Master-Bilt Shingles and Insulated Sidings

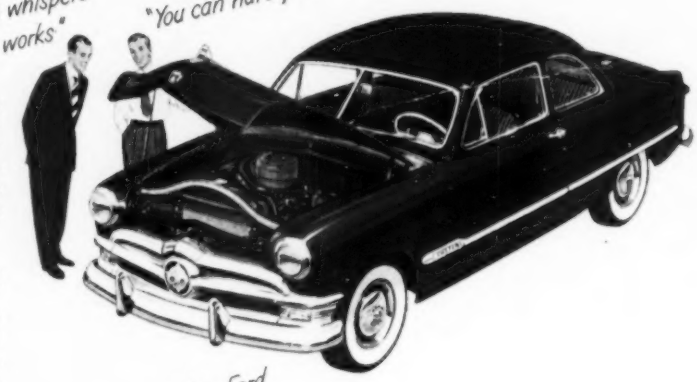
What makes a fine car FINE, Ford HAS!

"Compare Ford with the most expensive car on the road"

Ride for ride, it doesn't take its hat off to anybody! From the new front seat with non-sag springs and buoyant foam-rubber cushion, to the hushed "Mid Ship" ride in the "sound-conditioned," heavy gauge steel "Lifeguard" body, you get comfort that's in a class by itself!

"That V-8 whispers while it works"

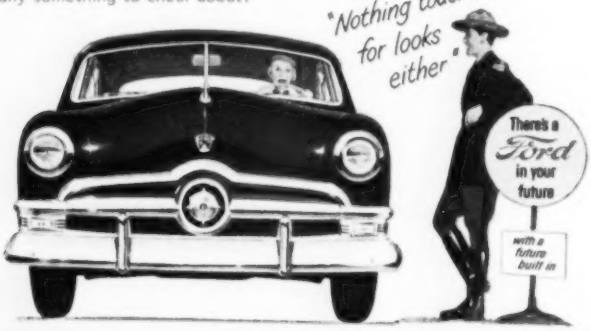
"You can hardly hear it"



Power per pound, ah, there's the secret of that sweet Ford "feel"! The '50 Ford has a new 100 horsepower V-8, the same type engine used in America's finest cars and it runs so very quietly you'll say: "It whispers while it works!"

Safety for safety . . . Ford takes the cup here, too, with those "King Size" Brakes that gentle you down to a full stop with 35% less pedal push! And those big windows give you a "look see" fore and aft, that's really something to cheer about!

"Nothing touches Ford for looks either"



Fine, yes, fine at low dollar price. Just add up the things you call "fine"—style, comfort, performance, safety—you get 'em all in the '50 Ford plus another little item big cars can't even claim, and that's economy!

"TEST-DRIVE" A '50 FORD
before you buy any car!

Farmer's Washington

[*From page 8*]

or tries to dominate, the agriculture committee. The Oklahoma senator is very jealous of his rights. Anderson has been trying to soft-pedal his differences with Thomas. At the bottom of the dispute is that same old issue, the Brannan Plan. Anderson wants it to die a natural—and quiet—death. But Thomas is talking about holding hearings on the plan in various parts of the country after the Congress adjourns.

Whose ox is gored? The glut of potatoes has caused an acute political problem. But you can't stop the march of progress. In the last issue of the *Conservation News*, the Department of Agriculture brags of being able to double the production of Irish potatoes on the same acreage. It would satisfy Secretary Brannan better if farmers produced *half* as much.

Borer business. The fight against the corn borer will be centered in Iowa this year. Facilities at Toledo, Ohio; Lafayette, Indiana; and Muscatine, Iowa, will will be moved to the Ankeny field station of the Iowa State College of Agriculture. Work on types of corn resistant to the borer will be continued at the Toledo research station, however.

Squeeze on co-op profits. The squeeze on the tax-exempt status of consumers' cooperatives has become stronger. This is an old debate. Co-ops have succeeded in resisting the pressure to take away their tax advantage. But it is also true that the dairy and butter lobby fought successfully for a long time to maintain the tax advantage of butter over oleo—and in the end they lost that fight.

What worries the co-ops is this: There are all kinds of pressure in Congress for new sources of tax revenue to make up for that which would be lost if excise taxes were repealed. And, unless that revenue is found, Mr. Truman is likely to veto any excise-tax repealer. A sweetheart of a way to get revenue would be to slap a corporate income tax on the co-ops and on patronage dividends.

Representative Noah Mason (Republican) of Illinois has introduced legislation to tax the co-ops, but at time of writing there is no immediate prospect that the bill will be passed. The long-range prospect, however, is not quite so favorable for the co-ops, so they are fighting as hard as they can to make a conclusive record in committee hearings in Congress which will show that the co-ops deserve and are entitled to their favorable tax status.

Stamp plan. Some of the old-timers at watching agricultural news in Washington think there is a good prospect of reviving the old food stamp plan for distribution of food surpluses. This has been proposed in Congress, and a group of Republicans has advocated giving away the surpluses: (a) to other nations; (b) to state and local welfare agencies; and (c) to private charities.

The Brannan Plan contemplates a revival of the food stamps, and it certainly has become evident that some regularized way will have to be figured out to get rid of surpluses. Nothing short of a big drouth or another war would do the job effectively. Heaven forbid both! **END**

Smart, Modern Farmers Know

EVEN HANDS THIS DIRTY

COME CLEAN AS THIS!

SWIFTLY ROUTS OUT STUBBORN DIRT ORDINARY WASHUPS MISS—YET IT'S AMAZINGLY GENTLE!

See for yourself! LAVA *cleans* so much *faster*—so much *better!* Quickly routs out the stubbornest dirt, machine oil, grease—even paint, rust and tar. Does away with animal odors. Works wonders in hot or cold, hard or soft water.

Yet super-speed LAVA is amazingly gentle... great for Mom or the children. Buy LAVA for the whole family—*today!*

HOW LAVA'S DOUBLE-ACTION WORKS!

(1) In every inch of LAVA'S rich, snow-white lather, 50,000 tiny scrubbers rout out ground-in dirt.

(2) Yet LAVA is amazingly gentle! LAVA contains the same soothing ingredient as in costly hand lotions.

Mothers! No More Smudged Towels!

Right! After a speedy LAVA washup, dirt's off—down the drain. There's none left on hands to soil your clean towels.

NOTHING CLEANS BETTER THAN **LAVA**

The good gray bar with the creamy, snow-white lather

Tearing your hair over crusty pans?

BRILLO

gives TWICE the SHINE in HALF the TIME!

New "Scorchy Pan" Tests on crusty aluminums *prove* Brillo outshines all other types of cleansers tested! Scientific shine-meters show Brillo actually gives aluminums *twice the shine in half the time!*

A square, metal-fiber Brillo *pad-with-soap* just whisks off crust! And the *jeweler's polish* in Brillo soap gives a fast, easy shine! No scouring! No soaking! Use Brillo on pans every day. *Get twice the shine in half the time!*

★ GREEN box — pads and cake soap
★ RED box — soap-filled pads

There's jeweler's polish in BRILLO

You'll learn more than you'll tell in the Farm Census

By Bertha Newhoff

When the Farm Census enumerator calls at your place some time in April, your answers to his questions—along with the answers of millions of other farmers—later will tell *you* many facts you will find it profitable to know about American agriculture.

By the time you read this, you've probably received in the mail the Farm Census questionnaire you are to fill out. Try to have it completed when your local census enumerator comes around early in April. If any of the questions puzzle you, he will help you answer them then.

During March, every rural route boxholder in 41 states was to have received a Farm Census questionnaire, to be filled in by himself. In seven Southern states, self-enumeration isn't being followed because of complications arising from multi-unit farm operations.

The Farm Census is one of three parts of the regular United States Census, taken every 10 years by the Commerce Department Census Bureau and authorized in the first article of the Constitution. The other parts deal with population and housing. The Farm Census is the part most closely affecting you and the whole of American agriculture.

Only from the facts brought out by the census (and compiled by the Commerce Department) can the government and the people behind it really understand the economic, social, and agricultural conditions throughout the country, and how these conditions have changed since the last census. For instance, on this information will depend possible legislation affecting agriculture, such as the questions of price supports, conservation measures, acreage allotments, and so forth.

One reason the 1950 Farm Census may affect legislation is that it will classify farms by economic groups. It will distinguish between farms which produce significant amounts of agricultural products for sale and those farms which make no great contribution toward feeding the nation. As a result, if you are a heavy producer of grain, meat animals, milk, or cotton, you won't be lumped with the fellow on a small patch who gathers a few berries or sells a dozen Christmas trees and calls himself a "farmer."

So, it is to your own selfish interest to see that our farm population is accurately defined, and thereby make sure you and other genuine farmers are included in any farm program intended to cover the worthwhile producers.

Another way the Farm Census will benefit farm people is that it will make available to the industries and businesses serving agriculture up-to-date facts and figures, enabling them to do a more effective job. They will have a more intelligent idea of what farmers need and want, where the best farmers are concentrated, what kinds of crops they prefer to raise, and how to plan efficient distribution and use of these products.

By cooperating with the census taker in your neighborhood, you will be helping an old and valuable instrument of our government. The first population census in this country was taken in 1790, and the first Farm Census was made in 1840. At that time 70 percent of the people depended on farm income for their living. Since then the farm picture has greatly changed.

In 1945 only 17 percent of the people lived on farms, although the number of farms and acreage under tillage had increased 300 percent since 1840. The 1945 Farm Census showed there were 5,859,169 farms of all types in the country. Some authorities predict that the 1950 census, due to the classification of farms by economic levels, will show that the really good, productive farms will not total more than 4,500,000. The new figures will contribute to a better understanding of the value of farm land and buildings.

The 1950 Farm Census will include about 200 questions on agriculture. But don't get alarmed—no one farmer will be required to answer them all. The size of the country and its many kinds of farming make so many questions necessary. There will be nine regional farm schedules, and the census blank you receive will carry only those questions which apply to your own state.

To get a representative sample of basic population facts, the government will also ask each fifth person—including farmers—certain questions about education status, country of birth, income, unemployment, veteran status, and others.

These questions in the Farm Census were not chosen by whim or by guess. They have been carefully worked out by a committee of the Department of Commerce Census Bureau, in consultation with members of the United States Department of Agriculture and other experts from state colleges and the leading farm organizations.

The census enumerator is intensively trained for his job. Before he comes to your farm to pick up your questionnaire, he has taken an oath not to reveal any information given him—except to the Census Bureau. He is not permitted to show your answers or to reveal what you have told him, even to other members of your family. If he should reveal any facts illegally, he may be fined $1,000 or given two years in prison, or both.

So you need have no fear to answer the

[*Turn to page 18*

B.F. Goodrich

tractor tire with

POWER-CURVE CLEATS

outpulls other leading tires!

POWER-CURVE cleats are built extra high and tapered so they will slice into soil easily and bite deep to give top traction. But making cleats high and tapered calls for reinforcement—or they bend. Power-Curve cleats are reinforced two ways. First, by the curve itself. Second, by the check at the end. That gives you a real bite without bending.

For maximum self-cleaning, the Power-Curve is designed according to an exact mathematical formula so that the distance between each cleat is exactly the same at the center of the tread as it is at the shoulders. You get natural cleaning as the tire rolls. Again more traction!

It's no wonder that in hundreds of tests in all parts of the country this great new tire outpulled other leading brands. When tested side by side, the new Power-Curve outwore them all!

Compare

Take a look at the 3 leading tractor tires. If you can, watch all 3 in action. We think you will agree that the new 1950 B. F. Goodrich tire will give you more traction—save on fuel—and last you longer. *The B. F. Goodrich Company, Akron, Ohio.*

How to save on passenger tires

Most tires have cords that work out of rythm as in the picture at the left. Because cross-threads tie cords together, they bunch or gap. Result: overstrained cords invite trouble. BFG tires have cords that work together in perfect unison as in the center picture. There are no cross-threads. Each cord is perfectly spaced, under uniform tension. Rythmic flexing cords share the wear, cushion impacts, absorb road punch—give you a Rythm Ride. You save all the way.

RESEARCH KEEPS
B.F.Goodrich
FIRST IN RUBBER

Look for This Seal on Your Policies . . .

America Fore
★ INSURANCE GROUP ★

IT MEANS

SOUND PROTECTION

THERE is no better insurance protection than a policy in a company of The America Fore Group. . . . So when your agent or broker delivers you a policy bearing the America Fore seal, you will know that he has provided you with protection in a strong insurance company—one that has paid all just losses promptly and in full—through wars, depressions and disasters!

Rely on your local America Fore Insurance Man for sound insurance protection—and for full, friendly help in settling claims! To locate your nearby America Fore Insurance Man, call Western Union by number, ask for Operator 25.

THESE FIVE COMPANIES COMPRISE THE AMERICA FORE INSURANCE GROUP

CONTINENTAL • FIDELITY-PHENIX • NIAGARA • AMERICAN EAGLE

FIDELITY AND CASUALTY COMPANY OF NEW YORK

HOME OFFICE: 90 WILLIAM STREET, NEW YORK • HOME OFFICE: HARTFORD, CONNECTICUT

Farm Census

[*From page 16*]

census questions even though you know the enumerator personally. You can be confident the facts you give will be used *for*, not against, you. They *cannot* be used as a basis for raising your taxes or levying any assessments against your property or income. Even if some of the questions seem foolish to you, answer them to the best of your ability. They were chosen to provide information of the greatest value to the most possible people.

As farm operator, you should answer the agricultural questions yourself, as you know your own business best. However, if you are absent, another member of the family can answer for you.

You might be interested to know that censuses are neither new nor limited to our country or to our modern times. There is indication in the book of Exodus in the Bible that Moses enumerated the children of Israel when they left Egypt. The Domesday Book, part of which still exists, is the record of the census taken at the order of William the Conqueror soon after he became king of England almost 900 years ago.

In olden times, the reason for taking a census used to be to determine how many men were available for war. But our census started for a different purpose—to provide proportionate representation in the lower house of Congress. It still does.

In later years, the census has been broadened into a kind of gigantic mirror in which we can see our agriculture, housing, trade, industry, and other elements of our civilization. This gigantic inventory-taking deserves the cooperation of all American farmers. **END**

The folks on our cover

There's something about spring on a farm—it seems a little nicer than spring anywhere else.

On a farm, there is more newly green grass; more apple blossoms; more new calves learning, first to stand, then to walk and romp on their spindly legs.

And, for little boys and girls, it's the signal to start a whole summer of fun.

Little Janet Ann Kast is in favor of all this. Swinging on the pasture fence, she knows there will be bumblebees' nests to explore, creeks in which to wade—and cookies in Grandmother's kitchen.

To Janet Ann, her grandparents Mr. and Mrs. Fred Shough, and the rest of the Shough family, there's no better place to do the farming than in Lenawee County, Michigan. The grass grows lush and green for the Shough dairy herd, and a summer home in northern Michigan's woods is only an easy drive away.

As their children grew and acquired families of their own, Mr. and Mrs. Shough moved out of their big, rambling farm home and into the new "retirement" house shown on this month's cover. They had no thought of moving to town. There's no better place, they felt, to spend their hard-earned leisure than here. Besides, it makes the cooky jar handier for Janet Ann! **END**

WAYNE KING, "THE WALTZ KING," is one of America's most popular entertainers. He is also one of Standard Oil's best salesmen—and one of the reasons why our employees' jobs are stable and well-paid. His weekly Standard Oil television show is a delight to see and hear.

MORE THAN SWEET MUSIC COMES FROM THIS HORN

What happens when Wayne King sells you on trying Standard Oil products?

The Standard Oil agent delivers the products to your farm and the service station where you trade. Our refinery men send more products to the agent's bulk plant. Our pipeline men pump more crude oil to the refinery. Our drillers bring more oil to the surface.

Working together as an integrated team, the 46,700 employees of Standard Oil and its subsidiary companies are able to make more products, make them better and make them more readily available. The more we sell, the more people we need to make more products. Our employees become more secure in their jobs. New jobs open up.

Good products *plus* good salesmanship help make the American standard of living the highest in the world. *Everyone has a chance to earn more by producing more.*

ARCHIE DAILEY is one of our drillers. Our cost of finding crude oil has gone up 389% in the last ten years. Yet because of the progress of the oil industry, you now pay only 45% more for gasoline than you paid in 1940.

W. F. MICHAEL works at our Drumright, Oklahoma, pipeline pumping station. He helps keep crude oil flowing to our refineries, along a Standard Oil network to which many miles of new pipelines were added in 1949.

CHARLES QUINN is a stillman at our Sugar Creek, Missouri, refinery. Like each of our 46,700 employees, he is backed by a big investment in tools and equipment. This was made possible by the investment of the 96,800 owners of Standard Oil.

J. H. SCHAEFFER, agent, runs our Chesterfield, Missouri, bulk plant. He delivers our products to farms, to industry and to the independent service stations where they are sold to you and other Standard Oil customers.

STANDARD OIL COMPANY (INDIANA)

Friend to Friend

Farm Census a useful tool

In a country as big as ours, the federal Farm Census is the only organization capable of actually taking a complete inventory of American agriculture. Farmers, industry, and businesses serving agriculture all can make profitable use of the 1950 Census, to be taken this month.

Similar to the city merchant who inventories his business to see what he has, what he has accomplished, and where he is headed, agriculture needs to tally up its assets and see what lies ahead. For instance, every census since 1920 has shown a decrease in the number of the nation's farms, while the total acreage in farm land has increased steadily. Increased mechanization has accompanied this trend. The 1950 Census may show some new developments in this respect.

Since 1790 Uncle Sam has been counting noses every 10 years. The Census of Agriculture—a part of the regular Decennial Census of the United States—was started in 1840. It is an official government function regardless of what political party is in power. A big job, it deserves our support. For more facts on the Farm Census, see the article on page 16.

The livestock horizon

When calendars for 1900 were hung on farm kitchen walls, did any prophets foretell the day when draft horses would be practically extinct and 50 million crop acres thereby released for other livestock uses? If there were such predictions, we didn't hear them. Now, with the century half gone, are there any old prophets ready to predict events of parallel importance in the livestock business during the next 50 years?

Producers of commercial and purebred livestock are too likely to focus their attention on sources of change within their industry alone. They dare not forget the effect on livestock farming produced by seemingly unimportant things, such as gasoline was in 1900. On our farm we used gasoline for cooking purposes, buying it by the barrel very cheaply because it was a by-product of the petroleum industry. Yet its eventual use as a source of farm power unhorsed the horse.

Is science, through the development of hybrid corn in areas outside the original Cornbelt, likely to upset the livestock breeders' program? We believe the answer must be yes, unless politics neutralizes science. With corn supplies abundant, farmers of the Old South inevitably will swing to livestock unless prevented from doing so by lack of a historic base imposed through government controls.

Could a national standard for milk open up Eastern markets now protected from competition by local ordinances? If a flood of Midwest milk, released by the oleomargarine competition with butter, reached Eastern states, those dairymen would be put in a difficult position indeed. Would the resulting lower price to the consumer and increased use of dairy products, especially whole milk, justify the sacrifice of one region of farmers to those of other regions where production costs were lower?

Is the breeder of hogs likely to be more strongly affected by changes within his industry or by new methods of selling and marketing pork? We believe the latter will force the first step in changing the hog with which we have been long familiar. Certainly lard is no longer wanted. Will sheep, now at the very bottom of their cycle, find a new welcome in the Midwest to replace beef production now headed toward the Old South?

Will the inevitable result of pegging corn prices at $1.25 a bushel be an increased efficiency of corn raisers everywhere? The answer is yes, especially outside the Cornbelt.

Has industry something new for us in the housing and feeding of our livestock? A sharp cut in labor and housing costs would be bound to affect livestock production sharply. And to end a list of $64 questions, is industry going to remain prosperous enough for its workers to enjoy a normal consumption of livestock products through the years ahead?

The only answer I can give to my own questions is not an answer, but an admonition. If you would not be caught out on a limb in your livestock undertakings, you must look beyond your barns and feedlots to a broader horizon. You must watch for signs of change indicated by science, politics, and industry. I am highly optimistic about the fellow who reads these signs clearly and acts quickly.

More farm television programs

Television for and about farmers—a facility no self-respecting prophet would have dared predict 50 years ago—enlarged its territory recently when Station WOI-TV, operated by Iowa State College at Ames, began broadcasting programs. The college has been making educational sound movies for use by the station, and other films of this type will come from outside sources.

Any prophet today could safely predict that television is going to be a strong influence on farm life, and that within a short time it will be one of the greatest means of mass communication. And that brings up the questions of what kind of TV programs do farm families want and where can they get them?

Several agencies are attempting to provide the answers. The United States Department of Agriculture and the Land Grant College Extension Services hope they can televise to farmers information which will make farming and farm life easier, more profitable, and happier. How-to-do-it programs, scientific developments, livestock shows, cooking and home economics demonstrations are being planned. Let your station know what you and your family like on the TV screen.

Kirk Fox

CUSTOM-MADE HAVOLINE

The Best Motor Oil your money can buy

. . . to give you

BEST performance
BEST protection

Best for your truck

Best for your tractor

AN EXCLUSIVE new scientific formula makes Custom-Made Havoline Motor Oil even better than its famous predecessor, *better than any premium oil you can buy.* This great new motor oil *passes all requirements for heavy-duty motor oils,* including the stringent engine tests as established by government and industry.

Tested and proved in millions of miles of driving in all 48 states, Havoline is custom-made for your tractor, truck and automobile.

A money saver for old engines, a *must* for new ones, Custom-Made Havoline is now available from your local Texaco Man. For good pocketbook reasons order some Custom-Made Havoline today!

Why It Will Pay to Change to Custom-Made Havoline

1. Custom-Made Havoline not only gives even better lubrication protection, *but it actually cleans dirty engines*—and keeps them clean.

2. Custom-Made Havoline fights rust and sludge formation and reduces corrosive wear due to low temperature operation.

3. Custom-Made Havoline stands up at higher temperatures, flows freely in cold weather.

Here Are the Results of This New Oil Action

1. You get easier starting, smoother performance, more power, more gas-miles, better lubrication protection, longer engine life and lower upkeep costs.

2. In an old engine Custom-Made Havoline's superlative cleaning action removes sludge, dirt and other causes of wear.

3. In a new engine *Custom-Made Havoline will give added protection during the vital break-in period* and preserve the "new motor" performance longer.

Why We Say New Havoline Is Custom-Made

Actually, new Havoline is custom-made to give best protection and best performance in cars, trucks, and tractors. This has been proved in the laboratories and in millions of miles of driving in all 48 states.

Make no mistake, you can't get the performance of Custom-Made Havoline in any other motor oil. So order some today!

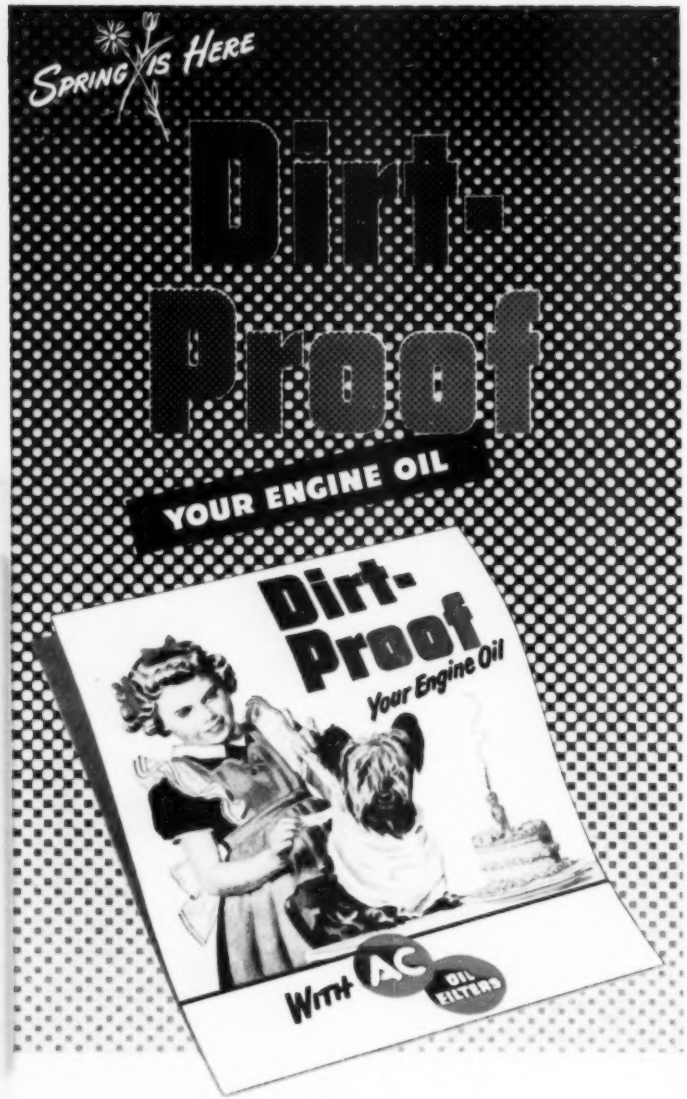
Best for your car

TEXACO
THE TEXAS COMPANY

IT PAYS TO FARM WITH TEXACO PRODUCTS

DIVISION OFFICES: Atlanta 1, Ga.; Boston 17, Mass.; Buffalo 3, N. Y.; Butte, Mont.; Chicago 4, Ill.; Dallas 2, Tex.; Denver 1, Colo.; Houston 1, Tex.; Indianapolis 1, Ind.; Los Angeles 15, Calif.; Minneapolis 2, Minn.; New Orleans 6, La.; New York 17, N. Y.; Norfolk 1, Va.; Seattle 11, Wash.

Texaco Petroleum Products are Manufactured and Distributed in Canada by McColl-Frontenac Oil Company Limited.



Perhaps you think that changing oil regularly will keep it clean and safe. It will not. Dirt enters every mile you drive. It should be removed immediately.

That's "Dirt-Proofing." An AC Element in your oil filter will constantly remove the dirt and sludge that clog piston rings, cause sticky valves—and excessive engine wear.

Changing oil is not enough. Watch your filter element, too, on your car, truck or tractor. If you have no filter, install an AC—the kind that "Dirt-Proofs" engine oil. Buy where you see the AC poster featured here.

AC OIL FILTERS

AC SPARK PLUGS AC FUEL PUMPS

preferred on millions of vehicles

AC SPARK PLUG DIVISION • GENERAL MOTORS CORPORATION

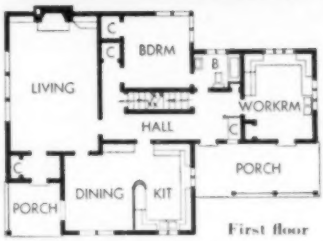
A farm-planned story-and-a-half home

The title above describes this home as "farm-planned," and here's what we mean by those words. *Successful Farming's* idea of what every farm home plan should contain is called the Big Three: (1) an entrance on the driveway to keep visitors away from the back door; (2) a central hallway to cut traffic through rooms; (3) and a utility or workroom to keep messy jobs out of the kitchen.

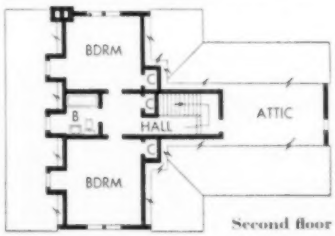
We first offered this plan in 1945 and the response was so good we decided to reoffer it. The living room in this home is 15′4″x21′6″ with a big fireplace at one end.

The kitchen itself isn't large (9′6″x 14′4″), but it *is* efficient. And you can see the driveway from the windows over the sink and the farmyard from the other window. The workroom in this house is 12′x14′2″ with a concrete floor.

You can get a complete set of plans and a cost-finding list of materials for building Home No. S1506 from one of the department stores listed on page 75 of this issue. Or, if one of these stores is not convenient to you, just send $2.50 direct to *Successful Farming* magazine, 1504 Meredith Building, Des Moines 3, Iowa. But whether you order by mail or buy direct from a store, be sure to mention the correct plan number of this house. Again, that number is S1506. **END**



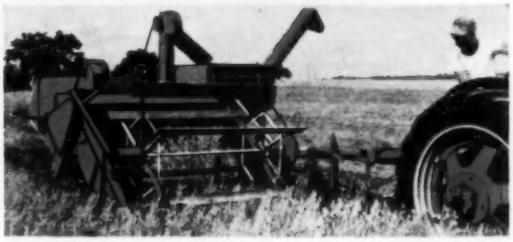
First floor



Second floor

See How Much More You Get

IN AMERICA'S FAVORITE COMBINE



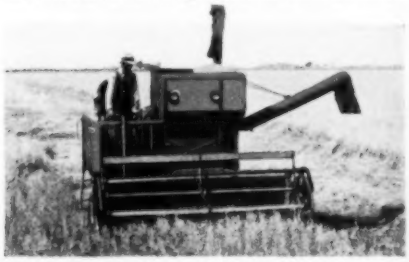
Ideal for power take-off operation with 2-plow tractors is the low-cost Case Model "F-2." It cuts a 5-foot swath, goes through 10-foot gates. Its seed-tight construction and the easy concave adjustment of its rub-bar cylinder adapt it to the diverse crops of conservation farming. Hydraulic header control is optional.

Saves'em All GRAINS, GRASSES, LEGUMES, BEANS

The more you know about combines, the more you'll like the extra thorough threshing, the extra separating and cleaning capacity built into the 6-foot Case Model "A." The more you want care-free operation and low upkeep, the more you'll think of its staunch construction and liberal use of ball and roller bearings.

Old hands and beginners alike appreciate its easy operation, handy adjustments and convenient lubrication. Growers of the finest flower and vegetable seeds, like those who harvest fragile lima beans, find the Case "A" saves their crops most surely and in best condition.

Now you can have the added convenience of hydraulic header control, using an ASAE standard portable cylinder with any tractor having modern hydraulic system. See your Case dealer now—learn how much more you can save of your crops, time and money.



Self-propelled Case combines, in 9 and 12-foot sizes, have a wide range of field speeds to work at correct capacity in all crop conditions.

Send for New Catalog

CASE

PASTE ON PENNY POST CARD

Get the last word on modern harvesting, including hydraulic header control. Mark machines that interest you—write in margin any others you need. Mail today to J. I. Case Co., Dept. D-77, Racine, Wis.

- ☐ 6-ft. "A" Combine
- ☐ 5-ft. "F-2" Combine
- ☐ Self-propelled Combines
- ☐ 9 and 12-ft. Combines
- ☐ Windrowers
- ☐ 5-way Elevators

Name _____

Postoffice _____

RFD _____ State _____

What's new in homemaking

Spice-smart. The spice you want is at your finger tips with a turn of this rotary spice wheel. Holds 10

standard-sized, 2-ounce spice cans. Attach rack to underside of any cupboard shelf—space normally not used. Made of glistening, easy-to-clean plastic in red, white, or yellow. It's practical for your own kitchen, or an ideal gift for brides, showers, housewarmings. You'll find it in hardware, department stores, or $1.95 postpaid from the *Spotts Mfg. Co., 722 North Los Angeles Street, Anaheim, California.*

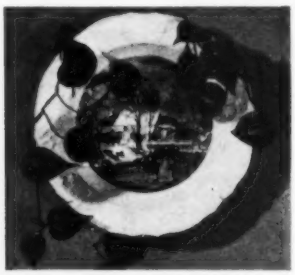
Catch of the season! Magna-Katch performs the ordinary job of bottle openers, also magnetizes the crown cap and holds it to the opener. It will save your chasing bottle caps to the far corners of the kitchen floor, under counters and stove. Magna-

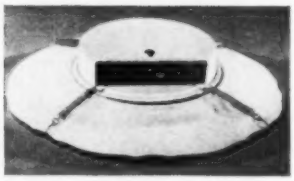
Katch is made of high-carbon steel, tempered for toughness and durability. Available in variety, hardware, department stores. Or order postpaid, 25 cents, from the *R. H. David Co., 520 Rossmor Building, St. Paul 1, Minnesota.*

Saw through bones and joints quickly, easily, and smoothly with the hardened steel blade of a Chefsaw. This aluminum kitchen saw has at least a hundred uses. It's ideal

for sawing frozen foods and meats, yet will also cut steel and brass. The handle is grooved for tenderizing tougher cuts of meats. Chefsaw is equally useful for dressing game or fish. Postpaid, $1; extra blades, three for 40 cents. Write directly to Dept. SFA, *Art Metal Appliance Co., 6758 Hollywood Blvd., Hollywood, California.*

Plant-a-Plate holds the plate out from the wall and has a container for planting ivy or philodendron. Good artistic effects can be created with your plates, or the plate shown. Four steel springs fasten the white enameled aluminum container to all round, standard-size or square tea-size plates. Will also fit service plates. Direct, postpaid, from *Norman's, 416*





Mill Street, Bristol, Pennsylvania. Planter, $1.50; Currier and Ives plate, $2.

A dripless sink strainer! Made of plastic material, the dripless strainer is not harmed by bleaching

agents, won't chip or crack from pounding against sink or garbage cans. Hot water will not distort it, and it is easy to clean. The strainer has a large capacity. Holes in bottom allow for drainage; by tilting the strainer when you pick it up, liquids are trapped in the solid "second bottom." In red, yellow, or white, at department, hardware, chain stores, 60 cents. *All Power Mfg. Co., 202 Roosevelt Avenue, Montebello, California.*

The Jiffy Plumber cleans out slow-draining or clogged pipes and traps in sinks, tubs, and basins. It is simply, but sturdily, built and consists of a handle, turning crank, and flexible shaft which is inserted

in the drain to be cleaned. A simple turning of the crank revolves the shaft, which feeds automatically into the drainpipe. Picks up lint, hair, and other stoppages for easy removal. Saves time, costly plumbing bills. Found in department, hardware stores, or $1.95, postpaid, from *Stow Mfg. Co., 1001 Shear Street, Binghamton, New York.* [*Turn to page 82*

Kelvinator, pioneer for 36 Years, brings you

this amazing

EXTRA-VALUE DEMONSTRATION!

At your Kelvinator Dealer's, Now!

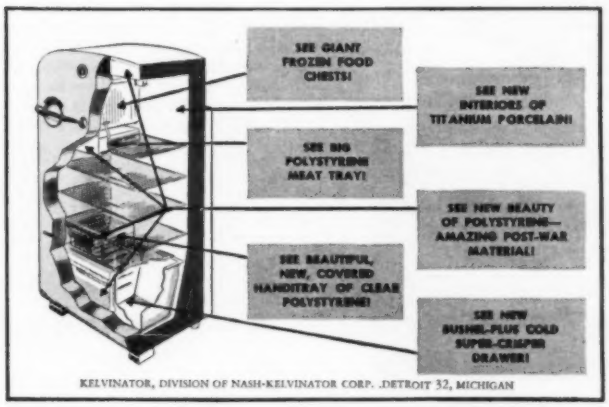
See this Big 12 cu. ft. Refrigerator designed especially for Farm Kitchens!

Yes! You'll see an amazing demonstration of foodkeeping usefulness for farm kitchens! You'll see even more cold space . . . up to 12 cu. ft. . . . in no more kitchen space! You'll see refrigerators *cold clear to the floor!* You'll see engineering wonders that you have to see to believe!

You'll see extra-useful features galore! Huge Frozen Food Chests that hold up to 80 lbs.! Extra-high, extra-roomy bottle storage! The Adjustable Shelf that quickly makes room for a milk can . . . other bulky foods! A Meat Tray of Polystyrene! The new, *cold* Super-Crisper Drawer that keeps over a bushel of fruits, vegetables and beverages *refrigerated.*

You'll see exciting new values in all 9 beautiful new Kelvinators! See them at your Kelvinator dealer's! You'll see why, dollar for dollar, Kelvinator is your best buy for the farm home, today!

Imagine! A big "12" that is only 31¼" wide, 28¾" deep, 60¼" high. It fits in your kitchen! Has 42½-lb. Frozen Food Chest, Big Sliding Meat Tray, Adjustable Shelves, bushel-plus *cold* Super-Crisper!



KELVINATOR, DIVISION OF NASH-KELVINATOR CORP. .DETROIT 32, MICHIGAN

Extra-Value Demonstration Proves Kelvinator Brings You Longer Wear . . . More Foodkeeping Usefulness for Your Farm Kitchen!

Right now, your Kelvinator dealer is prepared to show you that there's more to a Kelvinator than meets the eye!

You'll see Kelvinator's one-piece, wrap-around steel cabinet that's cross-braced like a bridge! A welded-steel cabinet liner that's rust-proofed inside and out! A triple-braced door that opens quietly on heavy-duty hinges! A special balloon-type gasket that seals in cold air! And Kelvinator's famed Polarsphere Cold Unit . . . that's permanently lubricated and sealed-in-steel for long-time dependability!

All in all, you get highest quality and sound extra value . . . that come from 36 years of Kelvinator "know-how"!

LOOK FOR THIS EMBLEM. Awarded to "5-Star" salesmen of Kelvinator dealers . . . it assures you the highest standard of courteous, helpful service!

Get the SPACE . . .
Get the BEAUTY . . .
Get the BUY . . .

Get Kelvinator

OLDEST MAKER OF ELECTRIC REFRIGERATION FOR THE HOME

The Ideal Way to Sleep

Here in the buoyant luxury of Karpen's exclusive Pil-O-Rest is the kind of sleeping comfort you've been looking for! Designed for complete body relaxation, Pil-O-Rest alone offers this healthful sleep-inducing combination . . . soft, channeled pillows that conform to every body contour, plus the healthful support of a firm yet resilient tuftless innerspring mattress.

Now, thanks to the magic of Pil-O-Rest's "comfort-contour," you actually rest in pillowed comfort while sleeping on a firm, tuftless innerspring mattress. The result is a really restful, relaxing sleep heretofore unknown! See your nearest Karpen dealer for details today. Other mattresses in the Healthway line $39.50 and $49.50.

KARPEN

Pil-O-Rest

Reg. U. S. Pat. Off.

$59.50

Matching Box Spring—$59.50

(Slightly higher west of the Rockies.)

The First and Only Mattress with this exclusive Sleep-Inducing Combination

A Complete Innerspring Mattress plus Channeled Pillows Top and Bottom

S. KARPEN & BROS.

Chicago • New York • Los Angeles • Lexington
Dyersburg • San Francisco

KARPEN Guaranteed MATTRESS

From the Healthway® line

Manufacturers of Karpen Guaranteed Furniture Mattresses and Transportation Seating

®

What *do you think?*

YOUR LETTERS TO US

Purebred Shorthorns

To the Editor: Thanks for the editorial on purebreds in the February issue (page 20). You and other farm editors have an important part to play in the livestock improvement program, for raising the more practical livestock does no good unless we breeders can sell them to the commercial producers.

As a boy, I saw my father's purebred black Poland China herd degenerate. The 400- to 500-pound meaty (not lardy) sows that averaged eight pigs were practical. Blue ribbons on *smoothness*, and demand for that kind, degenerated them them to 180-pound lumps of fat that had three or four pigs to a litter—some none at all.

Our cattle are going down the same degenerate route. And this at a time when fat is without a market. Gasoline engines and electric motors do the heavy work that used to burn fat off peoples' bodies, and people are eating less fat.

Yet when I try to sell a practical type of Milking Shorthorn—one that is a profitable producer of meat and milk—many buyers say they are hunting for a short-legged animal. No reason, except they saw a blue ribbon on one like that. Yet when they buy it, they get much less meat and milk from their calves and blame the purebreds instead of their own lack of judgment.

We purebred breeders can raise much more useful cattle if you editors help us sell that kind.

Thanks a million for starting the good work.

—Clinton J. Reed,
Breeder of purebred Milking Shorthorns,
Newkirk, Oklahoma

New slant to Brannan Plan

To the Editor: It seems that everyone wants to get on the bandwagon with those who are opposed to the Brannan Farm Plan. I am one farmer who is *for* it in principle. However, I would like to see the following differences incorporated into the Plan:

1. Farm support prices should be given at the source, or through the Agricultural

[*Turn to page 28*

SUCCESSFUL FARMING

"Byron! Where did you get those box tops?"

ANAHIST for COLDS

— the only antihistamine proved safe and effective by doctors in

READER'S DIGEST

ANAHIST TRADE MARK *can stop cold symptoms in a single day—**SAFELY!***

Follow directions on label

In telling the exciting story of medical research to combat the Common Cold, READER'S DIGEST calls the introduction of ANAHIST *"the Best Health News of the Year."*

For, as this authoritative READER'S DIGEST article points out: *"It is safe."* Of the people receiving the ANAHIST treatment in extensive tests under strict medical supervision, not one *"got sleepy or showed any other side effects."*

What ANAHIST Can Do for You:

1. Taken as directed, immediately upon exposure to colds or at the first sign of a cold, ANAHIST can eliminate cold symptoms in a single day!

2. By taking ANAHIST instantly upon contact with anyone who has a cold, you can *check its spread.* So, a cold need no longer pass from one to another in a family, if *all* take ANAHIST promptly.

3. With ANAHIST taken as recommended, your family may now avoid bad colds and their complications all year 'round.

ALL ANTIHISTAMINES ARE NOT ALIKE! . . . ANAHIST'S full 25 mg. antihistamine tablets provide the MEDICALLY-PROVED SAFE AND EFFECTIVE dosage for colds, now available without a prescription.

© 1950

Buy at Your Drug Store

New Super-Economy Family-Size Bottle, 100 ANAHIST tablets — at a cost of only about 2¢ per tablet.

Also, regular *Family-Size Bottles* of 40 tablets and handy *Pocket-Size Bottles* of 15 tablets.

For Hay Fever, too

ANAHIST offers prompt, efficient relief for hay fever. See directions on package. ANAHIST—new miracle antihistamine discovery — is the exclusive trademark of ANAHIST CO., INC., Yonkers 2, N. Y.

James Ewart family, 3232 S.E. Gladstone St., Portland, Ore. Mrs. Ewart writes: "When Jimmy caught cold on School Safety Patrol, we *all* took ANAHIST. Jimmy's cold was gone next morning . . . and we never got it!"

R. Misura family, 212 Blaine Ave., Buffalo, N. Y. Mrs. Misura writes: "I wouldn't be without ANAHIST in the family! My husband took it—his cold never developed. Nancy took it—her cold ended in one day!"

W. K. Seay family, R.F.D. 3, Glen Allen, Va. "In this rural area our children tended to catch more colds than city children," writes Mrs. Seay, "—until a friend recommended ANAHIST! It really prevents those terrible colds!"

WATCH OUT FOR THESE 10 SIGNALS OF THE COMMON COLD

1. *stuffed-up or runny nose*
2. *sneezing*
3. *"ache-all-over" feeling*
4. *dryness in nose or throat*
5. *sore, itchy, or watering eyes*
6. *chilliness*
7. *headachy feeling*
8. *scratchy throat*
9. *feeling of tiredness*
10. *undue drowsiness*

TAKE ANAHIST IMMEDIATELY whenever you experience any of these Cold Signals—then continue with one ANAHIST tablet after each meal and before retiring—Continue this treatment 72 hours for maximum effectiveness.

Families Everywhere Say Goodbye to Colds with ANAHIST TRADE MARK

FOR '50— IT'S PHILCO

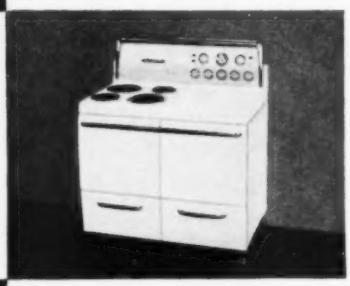
QUALITY FIRST

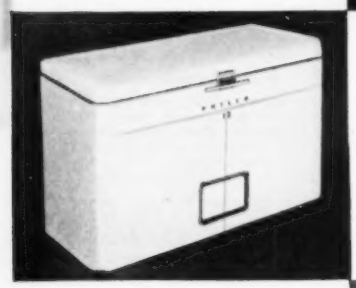
PHILCO QUALITY

. . . in America's top-value appliances for your home! magnificent refrigerators from 7 to 14½ cubic feet . . . sensational new electric ranges with single and double ovens . . . home freezers from 4 to 30 cubic feet . . . and the great 1950 line of radios and radio phonographs. See these *quality* Philco products—compare them for features, for value—at your Philco dealer's now.

Huge 2 cu. ft. Built-In Freezer in this great 11 cu. ft. refrigerator—separate shelf for ice trays—new Quick-Chiller—fully adjustable shelves—giant Freshener and Snack Box. Full-length door means cold clear to the floor. All yours for as much as $100 less than other refrigerator-freezer combinations on the market. Philco 1104.

Smokeless broiling at last with the sensational new Philco "Broil-Under-Glass" Electric Range. No soot, no smoke, no stain! Two superb ovens—fully automatic Banquet and Thrift Oven. Deluxe automatic controls cook entire meals automatically. See Philco Double-Oven Electric Range 408.





Super Values in Home Freezers, from 4 to 15 cubic feet—140 to 1050 pounds food capacity—chest models and uprights—temperatures as low as 15° below zero for sharp freezing—frozen storage at scientifically approved zero-zone temperatures. The greatest value in home freezers today.

Greatest value in 3-speed radio-phonograph. Plays all records, all sizes, all speeds fully automatically. Philco Super-Tone Reproducer gives finest tone ever achieved from recorded music. With new Philco super-sensitive AM radio. In beautiful Mahogany veneer cabinet, Philco Model 1718.

What do you think?

[*From page 26*]

County Committee, leaving the market free to find its own level.

2. Support prices should be denied to all corporate and chain farms and farms above a certain acreage, depending upon the section of country, locality, soil fertility, and crops grown. Support prices should be given to only those farmers operating a one-family type farm, either as owner or tenant. Both should be required to practice a minimum of conservation practices and operate on a balanced farming program.

3. Farm support prices to the one-family farm should be based upon an index of farm costs including labor of the farmer. This would give him a fair return for his risk and his labor in the same way other business profits are calculated.

4. Support prices should be based upon labor and consumer indices that the farmer can understand, and bylaws made public once a week with reasons for changes included.

5. Free commodity markets should be maintained at all times to give the consumer the benefit of lower prices that he should receive, in lieu of the taxes he will pay to support farm prices.

—*A. A. Caulkette, Grain Valley, Missouri*

And, we thank you

To the Editor: We have watched *Successful Farming* grow from a good little magazine to an excellent larger magazine and are grateful for the help it has given us.

It was in 1936 that we moved to a 136-acre farm "fresh from the city," and that summer became subscribers. Since then we have purchased our own machinery and are now operating a very successful business of our own.

Through this progressive growth we have found *Successful Farming* most helpful, especially the soil conservation and scientific advancement in grain and animal husbandry articles. We have increased the value of our farm and increased our income while simultaneously decreasing the amount of labor and man-hours required.

We thank you for the help we have received in the past, and look ahead to the help we know we shall receive in the future.

—*The Davidsons, Madison, Ohio*

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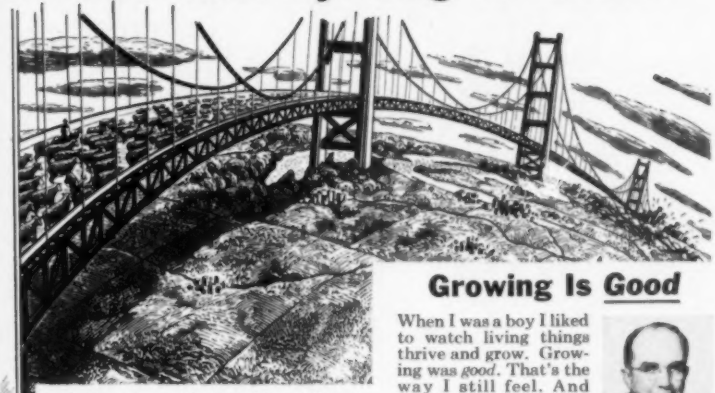
The bridge that runs from Wyoming to Boston



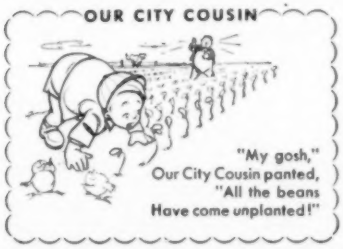
It's a long way from Medicine Bow to Boston . . . from the western cattle and sheep range country, from the feed lots and hog farms of the Corn Belt, to the hungry cities of the east. Between where the meat animals are raised and where the meat is eaten there's an average gap of a thousand miles.

Bridging that gap is a service performed by the meat packing companies of the United States. They buy the livestock on the farms and ranches, and in the scores of markets. They process it into meat. Then they deliver that meat to 300,000 retail stores in every city and town across the nation.

It's truly a nation-wide job. And just as truly it's a necessary and important one. For without this "bridge" that runs from Wyoming to Boston—without the meat packers' "pipe lines" which link supply to demand—livestock producers would have to limit their herds and flocks to the numbers that their small local markets could consume. And the supply of meat available for consumers to eat would be limited by the small numbers of livestock produced near the cities where they lived.

We of Swift are proud of our company's part in starting, organizing and carrying on the nation-wide distribution of meat. Gustavus Swift pioneered in the development of the refrigerator cars which made the whole thing possible. Today thousands of refrigerated freight cars and trucks supply the Swift network of refrigerated branch houses and plant sales routes which crisscross the nation. It is an important factor in one of the world's most efficient low-cost food distributing systems . . . Yes, we are a part of that great "bridge" which serves and benefits producers and consumers alike. And we are mighty proud of it!

OUR CITY COUSIN



A Route to Better Beef Cattle

by C. D. Lowe
U. S. Department of Agriculture

C. D. Lowe

The route to better beef cattle lies in a breeding program based on the use of sires selected largely on performance in converting grass, grain and other feeds into beef with the greatest efficiency. Recent studies have shown that gains made by young bulls in the 5 or 6 months after weaning are closely related to the performance of their own calves.

The above statements are strongly supported by the results of comprehensive tests conducted by federal and state experiment stations, in cooperation with private breeders. These tests reveal that the ability for rapid growth and efficient use of feeds is inherited; that a herd may be built up into "better doing" animals by following proper breeding practices.

Controlled experiments with the progeny of various bulls show that the ability to gain fast varies considerably in individual animals. Over an extended period the rate of gain varied a pound or more per day; feed requirements per 100 pounds of gain often vary from 15 to 20 per cent.

Another important finding was that there was no relation between the physical make-up of an animal and its ability to gain and use feed efficiently. In other words, bulls with the best "eye appeal" could not be counted on to sire "better doing" calves than their less attractive competitors.

It used to be that bulls were tested by the performance of their calves. The newer tests based on the gains made by the young bulls definitely shorten the time required to appraise a prospective herd sire.

FREE! Illustrated Booklet

The Story of Dairy Animals

Many interesting facts about dairy animals are told in Booklet F of our Elementary Science Series—"The Story of Dairy Animals." Illustrated, simply told, interesting to children or grown-ups. Write for your FREE copy today. And tell your teacher. If she asks for them we'll send free copies for every kid in the class. Other booklets about Soils, Plants, Meat Animals, Grass, Poultry are free to you, too. Address Agricultural Research Dept., *Story of Dairy Animals*, Swift & Company, Chicago 9, Illinois.

Growing Is *Good*

When I was a boy I liked to watch living things thrive and grow. Growing was *good*. That's the way I still feel. And that's the way Americans have always felt. As a nation we have grown from thirteen states to forty-eight—across the entire continent. We have grown in size and numbers, in strength and power. It's an American trait to be proud of growth.

Yes, whether it's the nation or livestock, men or businesses, I believe *growing* is *good*. Many companies have grown in size to meet their responsibilities. They served better.

Why has Swift & Company grown?

Most important is that people liked what we could do for them. Retail meat dealers learned that we provided the products and services they needed. Everything we sell must win the favor of the public. We were pleased to find housewives asking food stores for more of our meats, and asking for them oftener. We had to grow to keep up with the expanding demand for our services and products.

A lot of livestock and other products are needed to meet this demand. To get them we must buy in many markets. We're dealing with big areas and long distances and with food stores in every corner of the nation.

Meat packers of all sizes are needed to handle the nation's huge volume of livestock, and to process and distribute the meat. Some of these began business many years ago and have grown to serve producers and consumers across the nation. Swift & Company is one of these which grew up because there was a big job to do.

* * *

Hope you have a fine summer. If you get to Chicago be sure to drop in and see us. We will be with you again in September on this page.

F. M. Simpson, *Agricultural Research Department*

Martha Logan's Recipe for

BARBECUED FRANKS

Prepare a thick barbecue sauce. Add one cup sauce for each one pound of franks and heat 5 to 8 minutes.

Thick Barbecue Sauce:	
2 small onions, sliced thin	1 tsp. chili powder
2 tbsp. vinegar	¾ cup water
2 tbsp. Worcestershire sauce	¾ cup catsup
	1 tsp. salt

Mix all ingredients in a heavy skillet. Cover and simmer about 45 minutes. Yield, 2 cups sauce.

Swift & Company
UNION STOCK YARDS, CHICAGO 9, ILLINOIS

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No wonder you wake up with a

Back-ache

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Look what can happen to your spine when you sleep on a soft, sagging mattress! So many have found poorly fitted bed boards cannot possibly overcome the lack of support in the mattress itself. Why suffer needlessly?

Here's how you sleep on a Sealy Firm-O-Rest Innerspring Mattress

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From a farmer's notebook

By Leonard Hall

It's a good idea for a farmer to go abroad in the land now and again, away from his home valley and his own view. Thus will he see how other folk live—what problems of climate and soils or crowded cities and factory production lines they must contend with—and so come back content to his own green acres.

Mama and I returned not long ago from such a trip through the southeastern United States, which added up to nearly 6,000 miles of driving. And as no one sees more on such a trip than a farmer, I think some of our observations will be interesting to you.

The trip was not exactly made for pleasure. We talked to schools and other groups in 30 cities on the subject of soil conservation. These cities stretched from Missouri eastward to the Atlantic seaboard and down to Key West at the extreme southern tip of Florida. We crossed 10 states.

This is an old, long-settled part of our nation, so there is much of historic interest in both countryside and town. In the latter we met many fine people, ones concerned with preserving and restoring our natural resources. We made it a point always to eat a picnic lunch along the roads, so we could have casual talks with farmers, foresters, and travelers.

Much land in our southeastern states has been in cultivation for 300 years—a long time as American farming goes. This, combined with soil and climatic conditions and cropping systems long followed, has created problems different from those in the Midwest.

The soils are, in general, rather light and sandy, although there are exceptions. Rainfall east of the Appalachians is heavier than in our Mississippi Valley and on the plains to westward.

Over much of this area, pine is the usual forest cover, which often indicates a basic lack of limestone. Once the virgin timber was cut, row-crop farming became the rule. Corn, cotton, and tobacco were—and very often still are—the main crops. These have been raised on large plantations with cheap hand labor or on small individual holdings.

Little green-manuring was practiced, so the humus went first. Then the minerals leached out at the plow sole or washed away with the topsoil—sometimes to the point where livestock dependent on the land for forage actually starved to death.

Today there are many signs that the Southeast is on its way back. This doesn't mean cotton and tobacco have been abandoned as primary money crops. But here and there the land is green, showing that crop rotation is being practiced. Now and then you'll find whole farms in permanent grass, with broad fields sown to oats for winter pasture, and fine herds of beef or dairy cattle grazing.

It seemed to us that where the land was green, farms and towns had a distinctly prosperous appearance. Here were the white-painted farmhouses, good barns and fences, towns with wide, shaded streets and modern stores. And where the predominant color of land and vegetation was brown and gray, the opposite was true.

Florida, we think, must be treated by itself. We spent two warm and sun-drenched weeks there. Going into the state at Pensacola in the northwest corner, we drove almost 1,000 miles southward to reach Key West.

The citrus area starts well up in north-central Florida, extends outward to both coasts and south to the Everglades. From great Lake Okeechobee to Palm Beach stretches a broad, truck-farming area, while another is located far to the south of Miami in tropical surroundings.

Westward and southward from Okeechobee and in many other sections are vast reaches of prairie and wild, palmetto-studded grasslands devoted to cattle grazing. Here the long-eared, humped Brahmans are common. Where land is low in minerals and unimproved, the cattle are a sorry-looking lot. But where pastures are cleared and fertilized and the cattle are fed citrus pulp and molasses, it is a different story.

Key West on its tiny island at the extreme end of the Florida keys has a flavor to be found in no other American city, for it is truly tropical. Here are date and coconut palms, figs, bananas, rubber and kapok trees, limes, and a vast array of other vines, trees, and shrubs which are a mass of bloom the year around. Fishing is a primary industry. The atmosphere of the town is distinctly Spanish and life is more leisurely than in our clime. We couldn't help but feel the contrast as we turned northward.

Ours was, in every way, an interesting journey. Yet it is more than good to be home again. Thanks to Perry and Martha Ann and Buddy, all was well at Possum Trot. The new white-faced calves play in the pastures. Daisy and Ribbon nicker over the barnyard fence. The sun is warming and another season of planting, growth, and harvest is at hand. **END**

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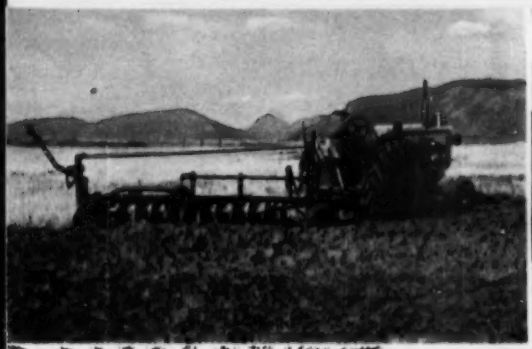
For 1950 . . . this is the ultimate in the long, low and lovely. A car boldly re-designed . . . re-styled to be dramatically and excitingly all-new everywhere you look! And this classic of modern streamlining appeals both to your pocketbook and to your pride in your own good taste . . . for its beauty also reflects the sound and inspired engineering and solid comfort inside. It will be the best car you ever drove, with extra headroom, legroom and shoulder-room—as well as the most beautifully new. Every great Chrysler advantage in room, convenience, safety, and performance has been retained! We cordially invite you to see it and drive it at your Chrysler dealer's today.
TODAY'S NEW STYLE CLASSIC . . .



MINNEAPOLIS-MOLINE

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SAVING TIME WITH REAL SAVINGS FOR YOU

Every modern farmer knows that time is an all important factor in every phase of farming . . . from the preparation of the seed bed to the harvest. It is with the *time factor* in mind that MM has designed and built a complete line of farm equipment, which by saving time in the field, gets the work done right, on time, every time, at a lower cost.

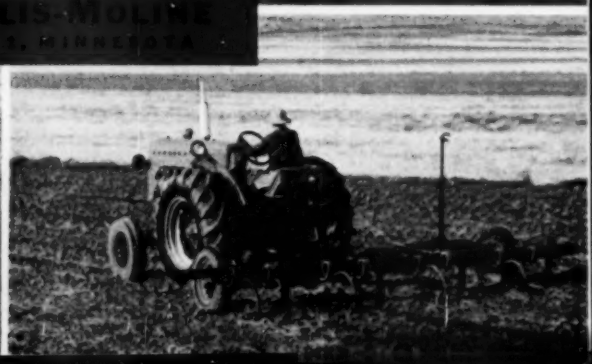
Among the many MM MODERN MACHINES, VISIONLINED TRACTORS and POWER UNITS, which are built under strict quality-control methods for dependable performance, are the original MM Quick-On—Quick-Off tools. This system of tractor-attached tools uses the square tool bar hitch and easy slip-pin method of attaching tools. You can save both time and money by using MM Quick-On—Quick-Off machines because they are interchangeable . . . you buy less equipment and you can save valuable time in attaching and detaching. When these tools are attached, they become an integral part of the tractor. They do not interfere in any way in turning, backing, or guiding the tractor, or with the vision of the operator. Tools lift quickly so time is saved in turning at the ends of the rows and require less headland. All-steel quality construction assures long life and easier handling.

DEPENDABILITY AND WORK DONE JUST THE WAY YOU WANT IT

MM quality has always assured dependability. Besides getting the job done right, on time, every time, MM farm equipment is ruggedly built of quality materials by quality-minded craftsmen; moreover, since many MM Modern Machines have fewer moving parts, maintenance is cut to a minimum . . . thus, saving on repair bills. Check with your MM dealer or write direct for complete information about MM Uni-Matic Power for hydraulic control of MM mounted and all pull-behind implements and about MM MODERN MACHINES, VISIONLINED TRACTORS and POWER UNITS . . . built for quality performance on your farm.

MINNEAPOLIS-MOLINE

MINNEAPOLIS 5, MINNESOTA



General farms are obsolete!

They make you work too hard, for too little money. The answer? Decide what type of farming you want to do, then do it well. These challenging thoughts are the result of studies on his Ohio farm, By Louis Bromfield

When we took over the worn-out fields at Malabar, we set up a plan based upon a 4- to 5-year rotation of wheat, oats, corn, and grass. We planned a general farm, including beef and dairy cattle, hogs, sheep, chickens, and a high degree of self-sufficiency.

It was a program advocated by all Midwest state agricultural colleges. Undeniably it had its virtues, particularly during the nineteenth century, when there were few, if any, telephones or fast freight trains, and no automobiles and no airplanes—when distribution of farm products was limited, and indeed primitive.

I confess. The self-sufficiency angle had a deep, traditional, and somewhat romantic appeal for me. During the war, when poultry, meat, cream, and butter became scarce—or at times unobtainable—the program paid off well. But those were conditions of wartime, when to some extent all of us lived under frontier conditions. They were by no means normal.

The 4-year rotation general farming plan stumbled along fairly well for a year or two. Then, slowly, we began to realize that we were not making much headway.

We found we were doing a great deal of running around. It took too many man-hours and too many different conditions of fencing and housing to maintain any considerable numbers of livestock of such variety. The dairy barn was no good for hogs, nor would the ordinary fences contain them. The chicken housing required a great deal of remodeling. The sheep had a tendency constantly to migrate through fences. They always headed toward the high ground, which was usually our neighbors' territory. The 200-tree apple orchard was actually a liability. It was not big enough to pay its way.

I believe the general farming 4- or 5-year rotation plan, which we tried to follow, means unjustified high capital investment in machinery, a great deal of man-hours spent in running around. In general, it means long hours and hard work for low profits. It is my own belief that the 4- to 5-year rotation general farming plan is obsolete.

It was necessary on the frontier—and it was justified during the period when agricultural experts sought to break down the old, greedy, cash-crop pattern of farming. But it no longer fits into the pattern of our times. We now live in a country which is highly industrialized. Our agriculture is highly mechanized. Distribution is widespread and at least mechanically efficient. In these circumstances, total self-sufficiency is out of place and perhaps even an economic mistake.

What we discovered—the hard way—was simply that we were trying to farm during the twentieth century in terms of the nineteenth, when both labor and time were cheap and little planning was necessary. Then, there were still in existence two ideas which were profoundly false: (1) that anyone could be a farmer; (2) that in order to be a good farmer a man had to kill himself with work.

The first idea—that anybody can farm—has cost this nation billions of dollars and produced in its day the "hick," who became a symbol of all farmers and the butt of vaudeville jokes. This idea destroyed hundreds of millions of acres of land, for which we are paying every day in higher and higher food costs and higher and higher taxes.

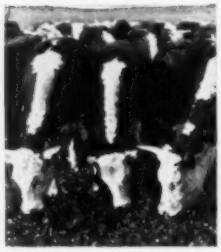
As to the second idea, the good modern farmer is the man who uses his brains and the knowledge available, instead of his muscles. The brains and the knowledge mean high profits, high living standards, pride, self-respect, and dignity.

In the beginning, our program had been determined somewhat by the character of the land, the low yields per acre, and the problem of getting *some* income. We carried some [*Turn to page 98*

1 Calves get the kind of winter ration that enables them to make best use of grass in the spring. Here, Mr. Watson scoops out corn-and-cob meal

2 Corn silage, all they will eat, is a part of winter ration. Gain, about 1 pound daily. Calves went to pasture about 2 weeks after above picture taken

3 Pasture must be 6" high in the spring before Watson will turn out calves. He seeds the slopes to make about two-thirds brome and one-third alfalfa. Reduces bloat hazard



4 Calves gain about 2 pounds per head daily through the pasture season. Watson thinks about half of this gain can be credited to grass and the other half to feeding on pasture

5 Early morning finds calves out on pasture filling paunches. One-half acre will carry a calf if some grain is fed. If not, takes one acre per calf

Grass through calves makes

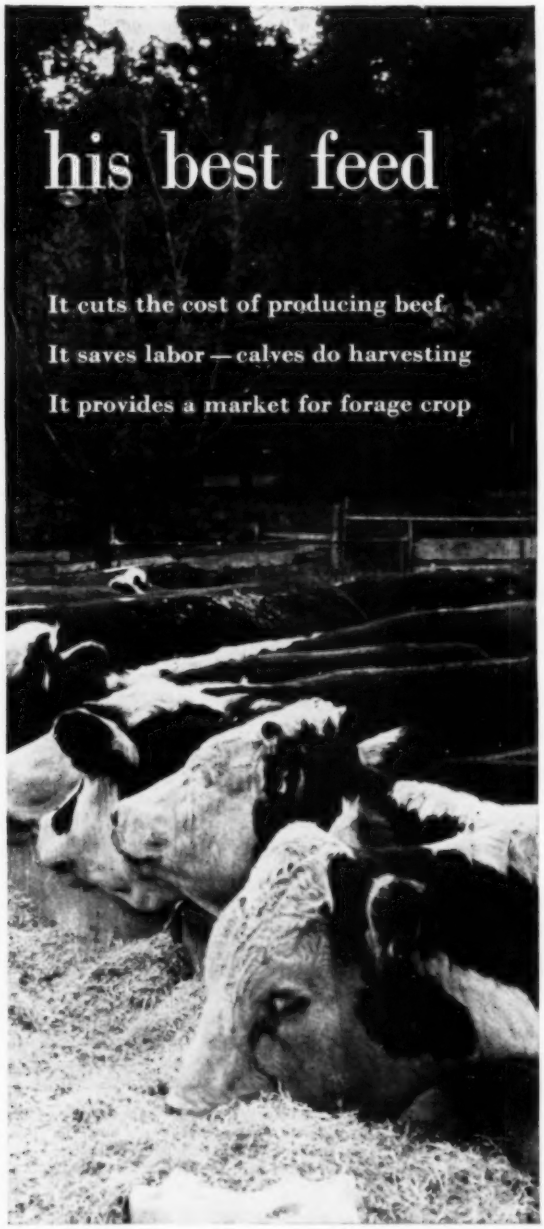
6 Noontime finds calves taking things easy and chewing cuds. On grass, calves get 15 pounds per head daily corn-and-cob meal, plus salt, mineral

7 Evening comes, and calves are out taking on another fill. Watson not so sure now whether it's best to pasture during night. May affect carcass quality

8 Makes hay from bromegrass in waterway. Uses 20' strips around cornfields. Grassed turnrows prevent erosion occurring when end rows go up and down hill

9 Calves drink from stock tank in corner of field nearest the barnlot. System of gates and lanes enables calves to use the tank, regardless of pasture grazed

10 Driving calves from one rotation pasture to the next. When grass is eaten to 3", shift the herd. Watson thinks a stand yields more feed when handled this way



his best feed

It cuts the cost of producing beef

It saves labor — calves do harvesting

It provides a market for forage crop

← **11** Grain feeding in dry lot is the last step before calves go to market. Here, they're getting an average of 20 pounds daily of corn-and-cob meal. Brome-alfalfa hay is fed separately. This phase of feeding starts in midsummer

By C. E. Hughes

Finding a profitable use for roughage grown under a soil-building program has never bothered Albert Watson of Wayne County, Nebraska. He finds that he can do as much with an acre of alfalfa-brome as he can with an acre of corn and that the grass will keep his land in better condition, besides.

Don't get the idea that Watson lives in an area where grass farming is the only way to handle soil. Actually, Wayne County probably has a greater percentage of tillable land than any other county in Nebraska. Watson keeps about one-third of his 320 acres in corn.

But, even so, Watson recognized the need for swinging into more of a soil-building program. He decided he must do something to head off sheet erosion which was slyly gnawing away at his soil resources.

Through the years, Watson has banked mainly on calves because they are recognized by stockmen as the safest risk in the cattle-feeding business. Watson usually buys steer calves, for he can carry them longer if the market takes an unfavorable turn, whereas heifers must go when they're ready. Watson took the heifers, shown at left, because they were an unusually good buy.

Watson gets his calves in mid-September when they weigh in the neighborhood of 400 pounds (the heifers weighed only 300). After a few days on bromegrass hay, the calves are turned out to pasture which has had six or seven weeks' rest since the previous bunch of calves was taken off and finished for market in dry lot. The calves often glean the cornfields till Christmas, although snow forced Watson to put the heifer calves on feed by mid-November. During the wintering phase, calves have access only to a shed during wet snows or cold rains. [*Turn to page 66*

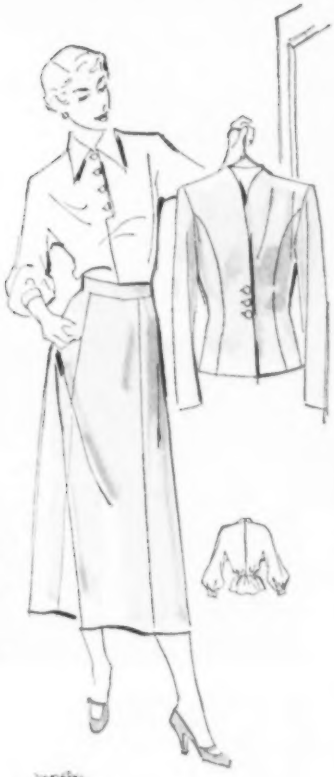
Smartly styled for

These flattering fashions will be a welcome addition to your spring wardrobe. Designed especially for the mature figure, they are easy to make, comfortable to wear, and proof that good taste and good looks come in full sizes. The up-to-the-minute style-lines are graceful and slimming. They are perfect examples of the simple eye-tricks that make the slightly heavier woman as attractively dressed as her size-14 friend. You'll find it's all a matter of [*Turn to page 183*

Be perfectly groomed in this shirt-waist classic. It's simple, serviceable, in timeless good taste. Becoming in chambray, broadcloth, butcher linen. Butterick Pattern No. 5140, sizes 12 to 48

This slimming redingote and dress combination has a fashion-plate look that is dressy enough to go anywhere. The dress has smart, simple lines and is comfortably cool for warm weather wear. Make it in a tiny, rayon shell print. Add coat in dark faille. Note good "long" look and graceful skirt flare. The two garments can be made from Butterick Pattern No. 5167 for about $16. Pattern in sizes 12 to 42

large figures



A neat blouse for your suit is a wardrobe "must." Wear the collar casually open or caught high with a handsome clip. Three-quarter dolman sleeves are easy to make, flattering to arms. Butterick Pattern No. 4800, available in sizes 12 to 42

For gracious entertaining, this afternoon dress is perfect. The low hip fullness is slenderizing and the graceful, wide collar gives an easy, flattering neckline. Made in a lovely light-colored crepe, the dress costs under $10. It is Butterick Pattern No. 5153 in sizes 12 to 44

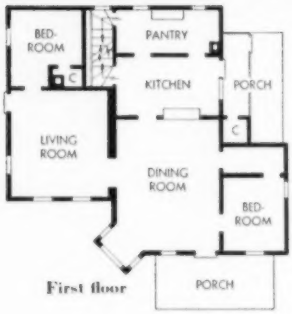
Trim and tailored, suit at right boasts slimming lines that do wonders for one's figure. Gently fitted jacket, comfortable, five-gore skirt are excellent. Make it in a season-smart, light-weight gabardine for spring and fall. Butterick Pattern No. 5034, available in sizes 12 to 46

By Nancy Carpenter

You will find these Butterick Patterns at local dealers, or send cash to The Butterick Company, 161 Sixth Avenue, New York 13, New York. Nos. 5034, 5153, 5167 are each 65 cents, No. 5140, 50 cents, No. 4800, 35 cents.

← **Before** remodeling, the Joslin home was noted for being one of the oldest farmhouses in the community. The floor plan below shows the inconvenient arrangement of rooms. Note the step-wasting kitchen and hard-to-reach entryways

↑ **After** the Joslins finished their remodeling work, they learned what a timesaver a good home can be. Visitors were frequent, and the Joslins welcomed them now that they had a home they could be proud of. Floor plan, right, shows change



First floor

Second floor

Dressing table in upstairs bathroom was built into corner. Joslins made good use of all their available space

If you've thought of remodeling . . .

the Roy Joslins are folks you'll want to read about. Their practical ideas built the home they always wanted

Dining-room storage was built beneath the new stairway. Mrs. Joslin wanted and got storage in every room

Second floor

First floor

By C. H. Van Vlack and Naomi Shank
Iowa State College

When the Roy Joslin family moved to a new farm in 1932, they had the dubious honor of living in one of the *oldest* houses in Cedar County, Iowa. The house was built in the 1850's. In that pre-Civil War period, builders didn't reckon with such conveniences as central heating, running water, waste disposal, stepsaving kitchens, or insulation.

In spite of the poor house and service buildings, however, Roy bought the 240-acre farm in 1941. He began a building program —with his land as well as his farm structures. Livestock is the mainstay of the Joslin operations. Roy usually feeds about 700 head of hogs every year as well as several loads of cattle. His new, all-weather hog house was featured in the June, 1949, issue of *Successful Farming*.

But let's get back to the home, or rather the home that used to be. After deciding that something had to be done with their old house, the Joslins lived with three questions in their minds for months: Was the old house worth remodeling? Would the remodeled house be satisfactory? Would the cost be reasonable?

Those three questions, considered from every angle, are the steppingstones to *any* successful remodeling. If you are thinking of remodeling, toss those questions [*Turn to page 124*

Family gatherings were one reason the Joslins decided to remodel their old farm home instead of building a new one of the same size. When all the members of their family get together, it's quite a crowd. The new fireplace is a favorite spot for relaxing after a big dinner

Master bedroom upstairs was changed also. Two new closets with sliding doors were built. The space between them is used for a dressing table

Special drawers in the kitchen cabinet are for appliances. They make it easy to remove without damage against the sides

Storage cabinets line three walls of the kitchen. The built-in slots hold mixing bowls and pans. The new kitchen is in a U-shape for stepsaving

Laundry chute was another new addition. Closet at right is cedar-lined for clothing storage. New closets were built in all of the bedrooms

EVERYBODY LIKES *Cake rolls*

Red Cherry Delight — *Ice Cream Roll* — *Pineapple Prizewinner* — *Party Special* — *Chocolate Roll*

The fact that you can make cake rolls as fancy or as plain as your time dictates, yet always have them as delicious as anything you've ever sunk a tooth into, makes them one of our favorite desserts. Menfolk just grin and eat to satiety.

Depending on what you use for filling—and there are few limitations—cake rolls are praise-getters at party or picnic, luncheon or dinner. They are as delightfully refreshing for an in-the-field snack as for the Ladies' Aid tea.

They also are fun to make—and beauties to behold when you get them filled and frosted. They take a bit more time than a regular cake, but we think the end product is worth it. For flawless results, there's this to do: Beat the egg yolks until they are so thick they stand in peaks. This is the most important step to getting a spongy, pliable cake that will roll nicely. Also, once the cake is out of the oven, continue to follow directions closely and work quickly.

By Martha Quinn and Lucille Reichlinger

FOR LUNCHEONS **FOR DINNERS** **FOR PICNICS** **FOR PARTIES** **FOR SNACKS**

Party Special

Serves 8 to 10

Combine **4 egg yolks**
1 tablespoon cold water
Beat until yolks stand in peaks.
Add gradually
1 cup sugar
Combine **1 cup sifted cake flour**
1 teaspoon baking powder
1/4 teaspoon salt
Add flour mixture to egg-yolk mixture.
Blend in **1 teaspoon vanilla**
1/4 teaspoon green food coloring
Fold in . . . **4 egg whites,** beaten stiff
Spread batter in waxed-paper-lined 10½x15-inch cake pan.
Bake at 350° for 20 to 25 minutes.
Loosen sides; turn out on towel dusted with **powdered sugar**
Remove waxed paper and trim crusts.
Roll quickly with fresh sheet of waxed paper on inside of roll.
Wrap in the sugared towel.
Cool on a cake rack.
Fill with **Marshmallow Frosting.**

Marshmallow Frosting

Combine **3/4 pound (48) marshmallows**
3/4 cup hot water
1/4 teaspoon salt
Melt marshmallows over boiling water.
Cool until slightly thickened.
Beat until fluffy.
Fold in . . . **3/4 cup heavy cream,** whipped
Chill until partly set.
Unroll cake; spread with half of frosting.
Roll cake again.
Spread outside with remaining frosting.
Top with **1/2 cup crushed peppermint candy**
Chill 1 to 2 hours before serving.

—*Mrs. Mabel Hake*

Pineapple Prizewinner

Serves 8 to 10

Combine **4 eggs**
4 tablespoons cold water
Beat until eggs are so thick they stand in peaks.
Sift together:
1 cup sugar
1 cup sifted flour
1 teaspoon baking powder
1/8 teaspoon salt
Add flour mixture gradually to egg mixture, beating until smooth.
Add . . . . . **1 teaspoon vanilla**
Spread batter in waxed-paper-lined 10½x15-inch cake pan.
Bake at 325° about 25 minutes.
Loosen sides and turn out on a large cloth dipped in cool clear water and wrung out.
Cover cake with the wet cloth.
Cool cake flat; do not roll.

[*Turn to page 52*

Draperies of plastic film can be had in a range of styles. Select and use as you would any fabric drapery, in combination with sheer panels, as draw draperies, or by themselves with cornice top

A room done entirely in plastic fabrics can be most attractive, for the wide variety of patterns and solid colors available makes any decorating scheme possible, without loss of warmth or style

Combine hard-wearing plastic fabrics with washable cotton rugs and simply styled furniture for an unbeatable combination in good looks, durability, and ease of cleaning. Such a trio is just the thing for Dad's den or the boys' room

No danger of fire if plastic film is used for curtains. It will melt under high temperatures, but will not support flame. On this basis, it's a safe bet in kitchens, workrooms, and recreation rooms, near fireplaces, or in the children's rooms

Friend Rover needn't be confined to basement when plastic upholstery is put to use. Dirt, hair, and food will wipe off in a minute, without fuss or worry. And no telltale dog odors, either

No need to scold your youngsters for accidents at the table if you've put plastic to good use. Both the chair covers and place mats are stainproof

The menfolk in your family like to lounge with their feet on the sofa? Go ahead and let them if you've used a

Plastic for bedspreads, too? Yes, if it's the mediumweight type. Avoid quilted tops, though, because quilting forms pinholes that collect dirt and dust, making cleaning a difficult job ↓

SAVE TIME FOR LIVING WITH

Wearable, washable rooms

By Kay Scott Jones

At long last, science has found a way to cut housework to a minimum, to make lying on the sofa "with your shoes on" a carefree proposition, to eliminate the need for scolding children with "be careful of that chair."

What is this miracle? It's plastic. Plastic in every size, shape, and form. For some time you've seen lots of it taking shape as kitchen curtains, rainwear, mattress covers, and chair covers. You're going to see a good deal more of it soon, in both yard goods and ready-made items.

Plastic film is available in heavy upholstery weights to use for permanent furniture coverings. It's available in slightly lighter weights for slipcovers and bedspreads. Medium to very lightweight films are being made into lamp shades, draperies, tablecloths, and curtains. All can be had ready-made or by the yard, in a wide variety of colors, checks, plaids, and florals. Some are translucent (allow light to pass through); some are opaque (allow no light through).

Just what does this widespread use of plastic mean to you, the homemaker? It means easier house cleaning, for one thing. As these plastic fabrics will not absorb dust, it's a simple matter to whisk over them with a damp cloth to clean them thoroughly. There is less need to replace worn furnishings, too, when plastic is used; it wears well.

The cost of most plastic fabrics is very low, even for the heaviest types. They can be sewed at home on any regular sewing machine, if you'll follow the tips given on page 178.

Properly used, plastic fabrics can be as attractive as they are useful. In older, more ornate homes, plastic should be used for upholstery just as leathers might be used—for dining-room chairs, lounge chairs, or sofas.

In newer, modern homes, its uses are unlimited. It can be used throughout a house without looking cold or stark, if rich colors and bright patterns are selected. It's warm and pliable to the touch, too.

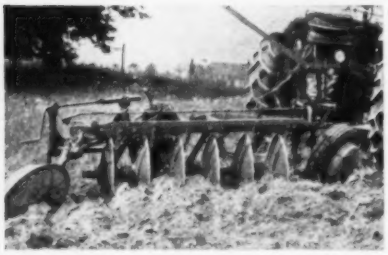
The color range in plastic fabrics is excellent, particularly in the heavy upholstery types, so finding the right color to blend with your furnishings should be easy.

Try plastic for a single chair, to see how you like it. You'll soon join others in asking the question, "Why didn't they think of this years ago?" END

sturdy plastic upholstery to cover it. Buy it plastic-covered, or cover it yourself if the sofa is simply styled

Plow packer trails behind plow, does one fitting operation at the same time

Auger plow is driven from power take-off, cuts horizontally. Two-plow tractor can cut 20-inch furrow



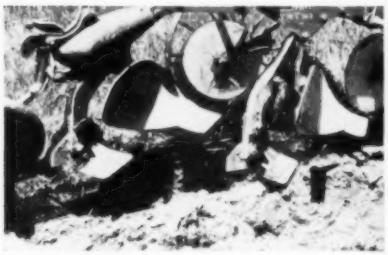
Vertical disc is common in West. Two-plow tractor takes 44-inch disc, 6 inches deep

Plow and mulcher uses regular plow with combination of spring-tooth, cultipacker

Tillage

how much? what kind?

Careful tests show you sometimes can substitute for the plow—but for most jobs it's still king



Subbase plow mixes subsoil with surface layer. Extra bottoms are 3 inches below regular

By R. L. Cook and F. W. Peikert
Michigan State College

There has been much discussion lately about whether other methods of preparing the seedbed are superior to the use of the conventional plow. This has come about by the introduction and more general use of the several new types of tillage machines.

One of these is the rotary-type tiller, which mixes the vegetation throughout the surface layer of the soil. Another is a type of moldboard plow which loosens the subsoil and mixes it with part of the topsoil.

In addition, there are now on the market—but not widely used—several machines which can be attached directly behind the regular moldboard plow so as to fit the soil ready for planting, as it is being turned. Disc-type plows, used in some places many years, now are going into new areas.

As farmers changed from animal to tractor power, there was a tendency in many cases to increase the amount of soil-fitting before planting. There still is considerable question as to just how *much the soil needs to be worked* to make a good seedbed.

We wanted to know just what method of soil preparation *did* give best results. So we went to the Agricultural Experiment Station of Michigan State College, which has been carrying on tests for several years with different types of tillage machines. These experiments were done on both clay loam and sandy loam, with the more common crops raised on each soil type.

On the clay loam soil, the crops were corn, sugar beets, oats seeded to sweet clover to be plowed under the following spring, and navy beans. The rotation was in that order.

In 1947, the crops on the sandy loam soil were corn and navy beans, following bromegrass. In 1948, corn again followed bromegrass, the beans followed corn, and oats followed beans.

We compared seven different groups of machines:

1. Conventional, 2-bottom plow, with follow-up tillage for the different crops as commonly used by farmers.

2. Plow with subbases. This type plow is designed to mix part of the lower soil with the top layer. Fitting of the soil was the same as for the conventional, moldboard plow.

3. Conventional, 2-bottom plow, with plow-packer attached. This prepares the seedbed in one operation without running the tractor over the plowed ground. When planting oats, a seeding unit was attached to the packer, so plowing and planting was in one operation.

4. Conventional, 2-bottom plow with mulcher attached, preparing the seedbed in a "once-over" operation.

5. Rotary-type tiller. The ground was covered one or more times, as necessary to work the soil to a depth of 6 inches. On ground free of vegetation, once over with hook tines prepared the soil. However, where there was much surface growth, best results were obtained by working the ground first to a depth of several inches with knife tines, following with hook tines.

6. Vertical-disc plow cutting a strip 44 inches wide to a depth of 6 inches. Follow-up land preparation consisted of discing and spring-tooth harrowing. Wherever possible, the land was only [*Turn to page 160*

Pig saver 6

Feed best to 75 pounds

This is a critical stage for pigs, so feed well here and make your feed savings later. Authors suggest new type rations for runts, scouring pigs, and for farms with high disease levels

By Dean Wolf and Damon Catron
Iowa State College

Increasing evidence has turned up during the past few years that we have been feeding "on the wrong end." Too many farmers feed their best rations to shove pigs weighing 75 pounds and more along to market. They've missed the critical times when feeding has the most to do with how many pigs are saved and how well they do.

All the feeding principles put together mean that, by doing an extra good job of feeding up to 75 pounds, you can move pigs along to market weight on less highly fortified rations which are less expensive. Feed the sow right at breeding time and during gestation and lactation. Feed the pigs right until they reach 75 pounds. Then, you can really start cutting feed-cost corners.

One Iowa farmer can tell you what happens when sows and pigs haven't been fed fortified rations during the pregnancy and suckling periods. Last spring he had a large number of sows, half to farrow in early April and the rest in June. The sows were fed a very simple ration of home-grown grains, soybean meal, and alfalfa meal. At farrowing time, pigs were weak and anemic. Many were squealers, with no pep to live.

By September 1, he sorted out an average of one runt per sow, ranging in weight from about 30 to 90 pounds. Some of the better early pigs weighed around 225.

Most of your sows may have farrowed by the time you read this article. Did you feed them right? Here's the test, and what you can do if you have slipped:

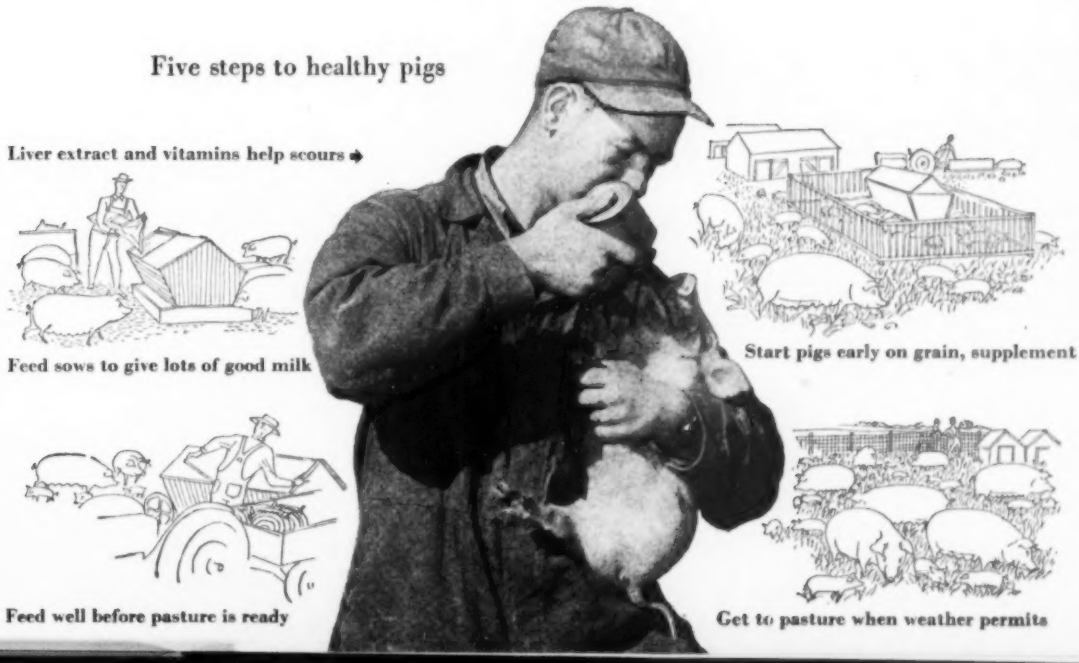
To supplement corn-soybean meal rations, use 5 to 15 percent high-quality alfalfa meal; or 5 percent alfalfa meal plus 10 percent dried corn distillers' solubles; or 5 to 10 percent high-quality alfalfa meal plus 10 percent meat and bone scraps or tankage; or feed 5 percent alfalfa meal plus 2 to 3 percent condensed fish solubles.

As supplements to rations containing animal proteins, feed 10 to 12 percent good alfalfa meal; or 4 percent alfalfa meal plus 6 percent corn distillers' solubles; or 5 percent alfalfa meal plus 1 to 2 percent condensed fish solubles; or 5 percent alfalfa meal plus 1 to 2 percent condensed fish solubles plus 1 of dried fermentation solubles.

If the ration you fed your sows during gestation doesn't meet up with the above, it's all the more important you fortify the ration during the suckling period. If your gestation ration had that extra punch, don't let up now. Keep those pigs building up more "storehouses" so you can cut costs from 75 pounds to market, when pigs eat the most feed.

More and more evidence is at hand that rations well fortified with B-vitamins, trace [*Turn to page 130*

Five steps to healthy pigs

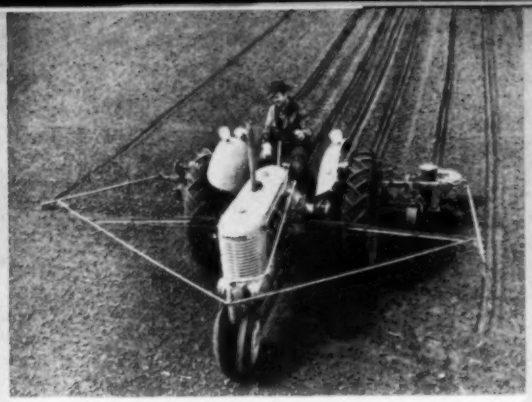


1 Your best field is none too good for this year's corn crop. If you don't have good clover to plow down for this year, hustle and seed down your grainfields for next year's corn

2 Soil moisture often is the thing that whips you when an August dry spell hits. Plenty of organic matter holds it in the soil, ready. You will want to consider irrigation, also

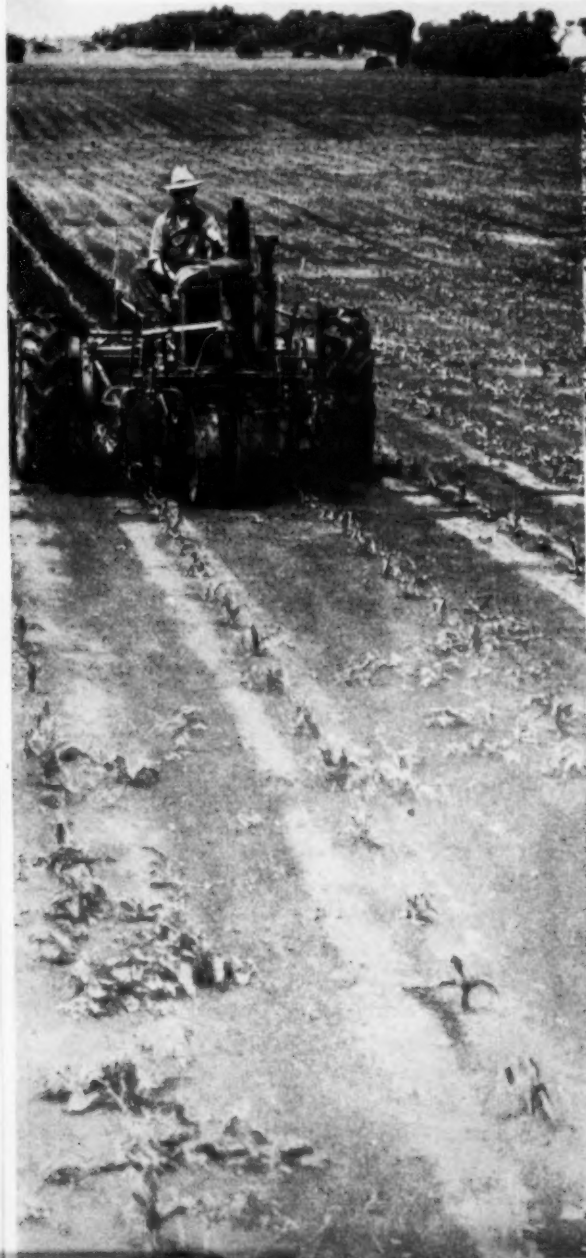
Six steps for more corn

This year, each acre must do its best. A dozen farmers from Nebraska to Pennsylvania experimented to find out how to get top corn yields.



3 Be pretty choosy about your seed. Plant a few rows each of several varieties; then use the highest yielder next year. Experiment every year—it is easy and it pays big

4 If soil fertility is high, you probably can plant a bit thicker. Normal stands now average about 10,000 to 12,000 plants to an acre. Yet good land can often handle up to 16,000



5 Extra nitrogen, tucked right down by the corn roots at the time of the second or third cultivation, paid off for every one of last year's experimenters. They used up to 250 pounds an acre

6 Don't grow weeds. If you've used 2,4-D, you probably no longer consider weeds a threat. If you haven't, try it—especially on your weediest spots. And don't forget good fitting, cultivation

By Richard Crabb

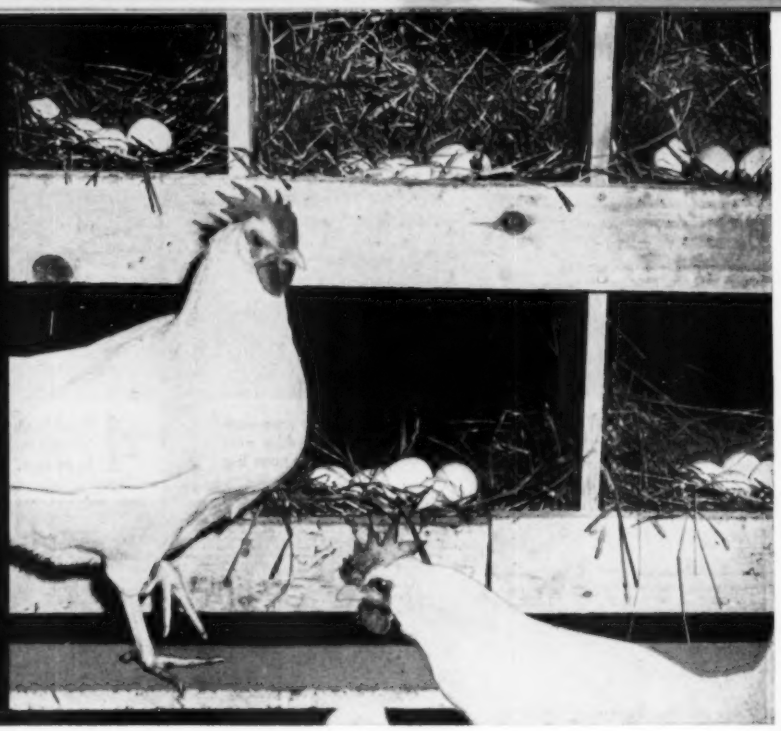
How much corn can you squeeze from an acre?

We've *always* tried to get every ear we could. But we never tried quite as hard as we will this year. Now, we want to make each acre of our corn allotment do its level best.

But how? Each of us has his own favorite theories on what makes a corn plant happy, healthy, and high-yielding. But we're willing to borrow an idea from our neighbor, too, if it seems to get results.

Last season a dozen good corn growers, scattered from western Nebraska to eastern Pennsylvania, got together on a plan to test out a lot of corn-growing theories. Cooperating with a large hybrid corn [*Turn to page 84*

More eggs less work



This Minnesota farmer has some unusual tricks for raising poultry. Not everyone will agree with all these ideas, but they work for him

Mr. Anderson buys good chicks, but doesn't pamper

Fills the hoppers with whole grains, supplement once daily—that ends it

Feedhoppers, waterers, and portable tank on range

Trying new plan of rearing with a low metal shelter. See article for details

"Many people work too hard and spend too much time taking care of poultry. They always are fussing around. One more job in the poultry house is hanging over them nearly all the time. The flock ties them down.

"Sooner or later, under those conditions, they usually get discouraged and go to the other extreme—either quitting chickens all together or neglecting them so much that the flock simply isn't profitable."

Hjalmer Anderson of Pope County, Minnesota, said that. He speaks from experience. His 1,000 layers last year averaged 225 eggs per hen. In 1948, he had only 400 layers.

"We buy good chicks from healthy, high-laying stock in the first place," Anderson explained, "and we take care of them, but we are not eternally babying them. I'll agree that chickens respond to care, but most of us must make up our minds how far we can go and still make a profit.

"I clean out the laying house just once a year, except around water fountains and under the droppings pits, where cleaning is done oftener. My hens are fed once a day and sometimes only every other day. I don't believe in gathering eggs several times daily. In winter I pick them up once every 24 hours and in the summer, twice."

This sounds as if Anderson's poultry enterprise is being neglected, but it isn't. When you know the whole story, his methods make sense. Added up, they amount to savings in time and labor as well as high returns from a healthy, vigorous flock.

Infrequent cleaning of the laying house, for example, is accounted for by [*Turn to page 163*

By Walter J. Hunt

Delicious desserts from eggs

Leftover egg whites and yolks are cooking "extras" familiar to all of you. In the past you probably have used some of them up in old stand-bys like soufflés and meringues, or by adding an extra yolk to a pudding or salad dressing.

But if you are looking for some really different ways to use leftover whites and yolks, here are some recipes that should delight you.

We call them "man-pleasers" because any man who likes desserts will love these.

Angel Cake Delight

Serves 12 to 14

Cut 9-inch angel food cake into 3 layers.
Blend together:
- **1/4 cup butter,** melted
- **1 cup sugar**
- **6 egg yolks**
- **1 lemon rind,** grated
- **1/3 cup lemon juice**
- **1/4 teaspoon salt**

Cook until thick, stirring constantly.
Cool.
Spread between cake layers.
Cream . . . **2 tablespoons butter**
Blend in **1/4 teaspoon salt**
- **1/2 teaspoon lemon extract**
- **1/2 teaspoon vanilla**
- **2 egg yolks**
- **1 cup sifted powdered sugar**
- **1 1/2 tablespoons milk**
- **2 drops yellow coloring**

Add . . . . . **1/2 cup sifted powdered sugar**
Ice cake. Let set 3 or 4 hours.

Egg "Peptail"

Serves 6

Mix together in a large pitcher:
- **8 well-beaten egg yolks**
- **2 cups milk**
- **2 cups orange juice**
- **2 tablespoons honey**
- **1/4 teaspoon salt**

Beat thoroughly.
Chill.
Top with dash of nutmeg.

Paradise Pudding

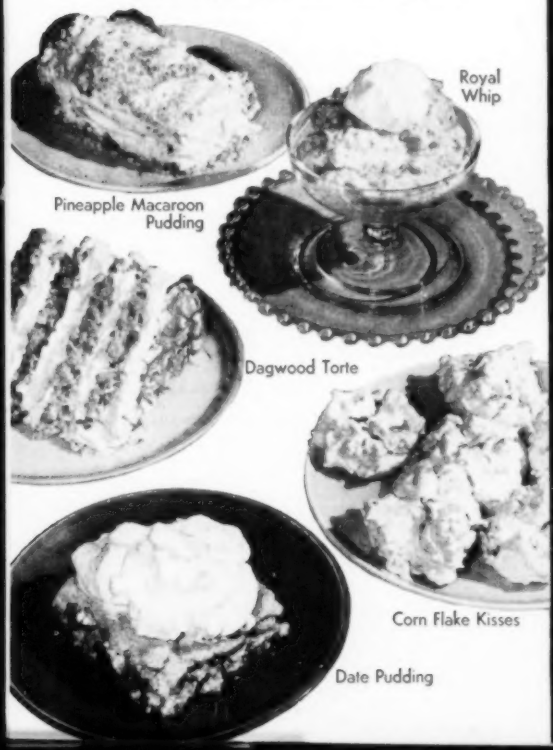
Serves 6

Cream together:
- **2 tablespoons butter**
- **3/4 cup powdered sugar**

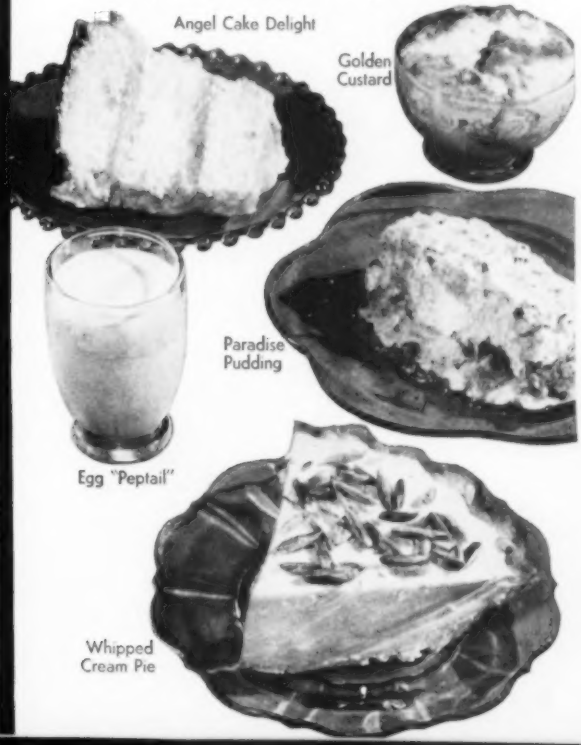
Blend in **2 egg yolks,** one at a time
Spread . . . **1/3 cup graham cracker crumbs** on bottom of 9x5x3-inch dish
Pour yolk mixture over crumbs.

[*Turn to page 58*

from leftover whites



from leftover yolks



How to beat the borer

If weather is right, last year's borer problem may return. Here's how to keep track of borers and how to fight them

Weather, wind, and corn borers. These are the three villains who sneaked into your fields last season and did you out of a lot of corn. Most damaging of the three were the borers. Fortunately, unlike the weather and wind, we can do something about borer damage.

But will we have to? Just what will the corn borer situation be this year?

It all depends on the weather. There is every reason to believe we can expect another year of bad acting from the borers. As the pickers pulled out of the fields last fall, the corn borer population was the highest in history. This lays a solid foundation for a record borer crop in this summer's corn.

Still, we must look to the weather for the final answer. Years of experience show us that good corn-growing weather is good borer-growing weather. Usually, the Cornbelt has favorable weather for corn. But exactly what will it be during the critical corn borer egg-laying period? Even the most expert weather prophets won't venture a guess.

The only thing to do this year is to prepare for the worst. Take every possible step to discourage the borers. Destruction of stalks, discing, clean plowing, and planting stiff-stalked, strong-shanked corn varieties will help.

And you'll do well to lay in a supply of DDT. Iowa's entomologist, Harold Gunderson, recommends that you have enough DDT on hand to treat first-brood borers, if necessary. That would be about 3 quarts of 25-percent DDT emulsifiable concentrate, or 3 pounds 50-percent DDT wettable powder, or 30 pounds 5-percent DDT dust for every acre of corn you expect to plant early.

Last June, during the height of the first-brood egg-laying period when DDT was needed most, none was available. There was no stock pile to draw from. Why? Because dealers and manufacturers could not afford to risk laying in large [*Turn to page 138*

By James Ayars and Arch Gilchrist

If you—and your neighbors—take away the borers' hiding places, you'll have a lot fewer moths flying in June. But if you are the only one who does it, your neighbors' fields will grow plenty of borers for all

WHEN TO SPRAY

1. Borer overwinters in stalks or fence-row cover. Though he looks cold, he's not cold enough—he'll come back to life in spring. But he can't live on bare, plowed ground

2. Borer larvae change into moths, which start flying and laying eggs in mid-June. Some tests with lights show promise of catching the moths, but are not yet proved

3. Best bet is to check daily. Count egg masses on 100 plants. If the total is 50 or more masses (on underside of leaves), it's probably time to haul out your sprayer

4. Most entomologists say to wait until corn is 35 inches tall, with the leaves pulled up straight. Borers don't seem to thrive on smaller corn. But don't wait too long, as many folks think they did last year. Wait 10-14 days after first eggs hatch, then feed borers 1½ pounds of actual DDT per acre. Be sure dust or spray gets down into the whorl of the corn plant. Borers go here to feed

HERE'S WHAT HAPPENS IF YOU DON'T SPRAY

1. This frass on outside of stalk tells you there's a hard-working, big-eating borer inside. By the time you see this damage, it's too late to get him

2. He will weaken stalk, and make it more likely to break. Even if it doesn't break, the borer has cut down the amount of food the stalk can carry up to the growing ear

3. Some borers work in ear, with these results. Borers were practically ruining early market sweet corn crop until DDT came to growers' rescue

4. Even if borer left ear alone, you still can suffer loss. Borer inside stalk caused this nubbin (right)

Morning favorite... SPAM 'N' EGGS

TRIED THIS WAY TO FRY EGGS? Put a little butter in a 6-inch frying pan, heat enough to melt and cover bottom. Break two eggs on flat saucer and slide gently into pan. Salt lightly. Cover and fry very slowly until whites are firm. Yolks will be soft. Continue cooking if you prefer them hard. Slice juicy, tender SPAM thick or thin as you like. Fry lightly both sides.

That IS a breakfast!

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SPAM *is a registered trademark for a pure pork product, packed only in 12 oz cans by Geo. A. Hormel & Co., Austin, Minn.*

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THE DIFFERENT CHILI—the kind everybody likes because it's not too hot, not too mild, but just right. Lots of good lean beef . . . plump red beans . . . a rich lively sauce. Double your money back if you don't like Chili the way Hormel makes it. Merely send sales slip with comments to Geo. A. Hormel & Co., Austin, Minnesota.

Listen to MUSIC WITH THE HORMEL GIRLS—6:30 P.M. EST—Sunday—ABC

Cake rolls

[*From page 40*]

Pineapple Filling

Combine **½ cup sugar**
2 tablespoons cornstarch
1 cup water
1 cup crushed pineapple
Cook until clear and thick, stirring constantly.
Cool.
Spread cake roll with filling.
Roll cake.
Combine **1½ cups heavy cream,** whipped
⅓ cup granulated sugar
¼ teaspoon vanilla
Spread over outside of cake roll.
Garnish with **maraschino cherries.**

—Mrs. Bernard Teeter, Iowa

Red Cherry Delight

Serves 8 to 10

Combine **4 eggs**
¾ teaspoon baking powder
¼ teaspoon salt
Place over **hot water**
Beat until eggs are so thick they stand in peaks.
Add gradually
¾ cup sugar
Remove from hot water.
Fold in . . **¾ cup sifted cake flour**
1 teaspoon vanilla
Turn into waxed-paper-lined, 10½x15 inch cake pan.
Bake at 400° for 15 to 18 minutes.
Loosen sides and turn out immediately onto towel sprinkled with **confectioners' sugar**
Remove waxed paper and trim crusts.
Roll quickly with fresh sheet of waxed paper on inside of roll.
Wrap in the sugared towel.
Cool on a cake rack.
Unroll; remove paper.
Spread cake with **Cherry Filling.**

—Mrs. I. E. Jorgenson, Minnesota

Cherry Filling

Combine **2 cups red sour cherries**
¾ cup cherry juice
1 cup sugar
2½ tablespoons cornstarch
¼ teaspoon red food coloring
Cook until smooth and thickened, stirring constantly.
Cool.
Add . . . . **4 drops almond extract**
Spread on unrolled cake.
Roll cake again.
Sprinkle with **confectioners' sugar.**

—Dorothy Hofbauer, Nebraska

SUCCESSFUL FARMING

Chocolate Roll

Serves 8 to 10

Combine **5 egg yolks**
5 tablespoons cold water
Beat until yolks are so thick they stand in peaks.
Add gradually
1 cup sugar
Beat well.
Combine **1 cup sifted cake flour**
2 teaspoons baking powder
¼ teaspoon salt
Add flour mixture to egg-yolk mixture.
Fold in . . . **5 egg whites,** beaten stiff
1 teaspoon vanilla
Spread batter in waxed-paper-lined, 10½x15-inch cake pan.
Bake at 350° for 25 to 30 minutes.
Loosen sides and turn out immediately onto a towel sprinkled with **confectioners' sugar**
Remove waxed paper and trim crusts.
Roll quickly with fresh sheet of waxed paper on inside of roll.
Wrap in the towel sprinkled with **confectioners' sugar**
Cool on a cake rack.
Unroll; remove paper.
Fill with **De Luxe Chocolate Icing.**

—Mrs. Tom Hill, Missouri

De Luxe Chocolate Icing

Cream together
⅔ cup butter
4½ cups sifted confectioners' sugar
Add . . . . . **2 unbeaten eggs**
½ teaspoon salt
4 squares unsweetened chocolate, melted
Beat until fluffy.
Spread half of icing on unrolled cake.
Roll again.
Spread outside with remaining icing.

—Mrs. Anton Armbrust, Minnesota

Ice Cream Roll

Serves 8 to 10

Combine **5 egg yolks**
2 tablespoons cold water
Beat until yolks stand in peaks.
Add gradually
¾ cup sugar
Beat well.
Sift together:
6 tablespoons sifted cake flour
6 tablespoons cocoa
1 teaspoon baking powder
½ teaspoon salt
Add flour mixture to egg-yolk mixture.
Fold in . . . **5 egg whites,** beaten stiff
1 teaspoon vanilla
Spread batter in waxed-paper-lined, greased, 10½x15-inch pan.
Bake at 350° for about 25 minutes.
Loosen sides and turn out immediately onto a towel sprinkled with **confectioners' sugar**
Remove waxed paper and trim crusts.
Roll quickly with fresh sheet of waxed paper on inside of roll.
Wrap in the sugar-coated towel.
Cool on a cake rack.
Unroll; remove paper.
Spread . . . **1 quart peppermint ice cream** over surface
Roll again.
Wrap in waxed paper or aluminum foil.
Place immediately in freezing compartment of your refrigerator. Leave it there 2 to 3 hours before serving.

—Mrs. H. A. Dunbar, Iowa

This golden touch brings everyday meals to life!

Hot crisp CORN BREAD makes a simple supper special!

Here's an easy way to give a lift to everyday meals like lamb stew. Serve them with good old-fashioned corn bread! It makes something special out of any weekday meal.

Easy-to-make one-bowl recipe serves nine

1 cup Quaker Yellow Corn Meal • 1 cup sifted enriched flour • ¼ cup sugar • 4 teaspoons baking powder • ½ teaspoon salt • 1 egg • 1 cup milk • ¼ cup shortening, soft

1. Sift dry ingredients into medium-sized bowl. Add egg, milk and shortening. **2.** Beat with rotary egg-beater until smooth, about 1 minute. **3.** Bake in greased 8-inch square pan in hot oven (425° F.) 20 to 25 minutes. Cut into squares and serve piping hot.

The lightest, crispest little pancakes you ever tasted—BATTY CAKES!

Here's a breakfast treat from the Old South your family will love! (Serves 6)

1 cup Quaker Corn Meal • ½ teaspoon soda
½ teaspoon salt • 1 beaten egg • 1¼ cups buttermilk

1. Sift together dry ingredients. **2.** Add beaten egg and buttermilk to dry ingredients, beating until smooth. **3.** Pour one tablespoon of batter for each cake onto a well-greased skillet. Bake until brown, turning only once. (If batter gets too thick, add a little more buttermilk.) **4.** Serve with maple syrup or molasses.

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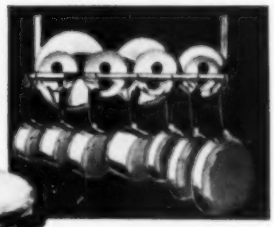

Save space and show off beautiful Revere Ware with the smart convenient Revere de Luxe Rack.

Beef Tamale Pie

Serves 4 to 6

Brown . . . **1 pound ground beef**
½ cup chopped onion in
2 tablespoons fat
Add . . . . . **2 cups canned tomatoes**
2 teaspoons chili powder
1 teaspoon salt
Simmer 30 minutes; add water if needed.
Add . . . . . **¾ cup corn meal** to
2 cups boiling water
Cook until thickened, stirring constantly.
Add . . . . **1 teaspoon salt**
Spread half the mush in bottom of greased, 1½-quart casserole.
Add meat; top with remaining mush.
Bake at 350° (moderate) 40 minutes.

—Mrs. J. L. Linscheid, Minnesota

Chow Mein Supreme

Serves 6

Brown . . . **1½ pounds pork,** cubed
½ cup chopped onion in
2 tablespoons fat
Blend in . **1 tablespoon flour**
Add . . . . . **2 10½-ounce cans** (2½ cups) **chicken rice soup**
1 cup sliced mushrooms
1½ teaspoons salt
⅛ teaspoon pepper
Simmer slowly 1 hour and 45 minutes.
Add . . . . . **¾ cup chopped celery**
½ cup uncooked rice
Simmer 45 minutes.
Serve over **chow mein noodles.**

—Borghilda Arneson, Minnesota

Dried Beef Casserole

Serves 6

Melt . . . . . **3 tablespoons butter**
Blend in . **3 tablespoons flour**
Add . . . . **¾ cup heavy cream**
1 cup liquid from peas
Cook until thick, stirring constantly.
Add . . . . . **1½ cups** (⅓ lb.) **shredded dried beef**
2 cups canned peas
¼ teaspoon pepper
Arrange . . **3 cups sliced cooked potatoes** in greased casserole
Sprinkle with
1 teaspoon salt
Pour dried-beef mixture over potatoes.
Top with **⅓ cup fine bread crumbs**
Bake at 375° (moderate oven) 20 minutes.

—Miss Myrtle Odland, Iowa

Good main dishes

Each recipe is practically a meal in itself, and takes so little of a homemaker's time

Creole Pork Steaks

Serves 6

Brown . . . **6 lean pork shoulder steaks** in their own fat
Season with
¾ teaspoon salt
⅛ teaspoon pepper
Drain all grease from steaks.
Place in ungreased, 2-quart casserole.
Cover pork with sauce made as follows:
Brown . . . **¼ cup grated onion**
1 garlic clove, minced
2 teaspoons chopped parsley
½ cup sliced mushrooms
¼ cup chopped green pepper
½ cup sliced stuffed olives in
1 tablespoon fat
Stir in . . . . **1 tablespoon flour**
Add . . . . . **2 cups tomato juice**
1 teaspoon salt
1 teaspoon sugar
Bake at 350° (moderate oven) 1 hour.

—Miss Elaine Bond, Iowa

Ham Supper Special

Serves 8 to 10

Saute . . . . **2 cups cubed ham**
¾ cup chopped green pepper
1 cup chopped onion in
1 tablespoon butter
Add . . . . . **8-ounce package noodles,** cooked and drained
2½ cups whole kernel corn
1 10½-oz. can tomato soup
Simmer 3 minutes.
Add . . . . . **¼ cup diced stuffed olives**
½ pound cream cheese
1 teaspoon salt
¼ teaspoon pepper
Bake in greased, 3-quart casserole at 350° (moderate) 35 minutes.

—Mrs. Harry Hofeldt, Nebraska

Frankfurter Surprise
Serves 4

Combine 2 cups tomatoes
½ cup chopped onion
1½ teaspoons salt
⅛ teaspoon pepper
1 teaspoon prepared mustard
1 cup quick oatmeal
Arrange in a greased, 1½-quart casserole in alternate layers with
2 cups canned green beans
Dot with 2 tablespoons butter
Top with 4 frankfurters, split
Bake at 400° (hot oven) 30 minutes.
—Mrs. Howard Young, Michigan

Spanish Casserole
Serves 8 to 10

Cook .... 8-ounce package noodles in boiling salted water
Drain and save liquid.
Brown ... 1½ pounds pork, cubed, in 1 tablespoon fat
Add ..... ½ cup chopped onion
2 tablespoons minced parsley
½ cup chopped green pepper
½ cup chopped celery
1 cup tomato juice
1 10 oz. can mushroom soup
2 teaspoons salt
¼ teaspoon pepper
1 cup liquid from noodles
Combine above mixture with noodles.
Pour into well-greased, 3-quart casserole.
Bake at 350° (moderate oven) 1½ hours.
—Mrs. William F. Lynch, Indiana

Midwestern Goulash
Serves 6

Brown ... 1 pound ground beef in 2 tablespoons fat
Combine 8-ounce package spaghetti, cooked and drained
1 10 oz. can vegetable soup
1 cup canned tomato juice
⅓ cup chopped onion
1½ teaspoons salt
¾ teaspoon chili powder
¼ teaspoon pepper
Combine beef and spaghetti mixture.
Pour into greased, 2-quart casserole.
Top with ¾ cup corn flakes
Bake at 350° (moderate oven) 1 hour.
—Mrs. A. D. Trochinski, Minnesota

Barbecued Short Ribs
Serves 6

Dredge ... 2 pounds short pork ribs in ⅓ cup flour
Brown in 2 tablespoons fat
Combine 1 cup catsup
½ cup water
¼ cup Worcestershire sauce
2 tablespoons vinegar
1 teaspoon chili powder
1 teaspoon salt
2 dashes Tabasco sauce
1 large onion, sliced
Pour over meat. Cover; simmer 1 hour.
Add ..... 6 to 8 large carrots
6 to 8 whole potatoes
Cover and cook 30 minutes longer.
—Mrs. Jean McCafferty, New York

Pork 'n' Noodles
Serves 8 to 10

Brown ... 1 pound pork, cubed
¼ pound veal, cubed, in ¼ cup fat
Add ..... 8-ounce package noodles, cooked and drained
½ cup chopped green pepper
½ cup chopped pimiento
2½ cups canned peas
1 10½-ounce can cream of chicken soup
½ pound grated American cheese
1 teaspoon salt
Mix well.
Pour into greased, 3-quart casserole.
Bake at 375° (moderate oven) 1 hour.
—Mrs. George Schneler, Minnesota

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The brand-new "Speedster"—with a score of de luxe features!

IT'S NEW! Another beautiful Push-button Range. With all the clean, cool, wonderful joys of G-E "Speed Cooking" at your finger tips!

IT'S FAST! Equipped with fast Calrod* heating units (each unit with 5 cooking heats, simmer to high) . . . a push button for every speed.

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IT'S A BUY! Has most of the worksaving, automatic features you'll find on General Electric's top-price Ranges! Yet the "Speedster" is offered at a never-before low price!

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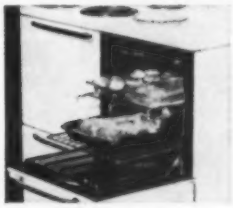
BE SURE TO SEE G. E's *All-Calrod "Stratoliner" and "Liberator"*—with built-in Pressure Cooker or two complete ovens! And on each an Extra-Hi-Speed Calrod unit that boils a pint of water in 4 minutes or less! Check that for speed against any other cooking method.



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4 qt., was $12.95, NOW $9.95
7 qt., was $16.95, NOW $14.95

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Above, famous Lurelle Guild design; 2, 3, 4, and 5 qt. sizes.
3 qt. size, $4.25.
Below, the new "Whistler" with thumb latch that zips the spout open—release, and it closes.
2½ qt., $3.95.

DRIP POTS		PERCOLATORS	
2-cup	$2.95	2-cup	$2.25
4-cup	3.25	4-cup	2.50
6-cup	3.60	6-cup	2.75
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WEAR-EVER
50TH ANNIVERSARY 1900 1950
All prices slightly higher in the West.
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THE ALUMINUM COOKING UTENSIL CO., DEPT. 5704, NEW KENSINGTON, PA.

Desserts from eggs

[*From page 49*]

Cover top of yolk mixture with another
⅓ cup graham cracker crumbs
Whip . . . . **1 cup heavy cream** until stiff
Add . . . . . **1 cup drained, crushed pineapple**
¼ cup chopped walnuts
Spread whipped cream mixture over top layer of cracker crumbs.
Chill 4 hours before serving.

Golden Custard

Serves 6

Scald . . . . **2 cups milk**
Blend in . **3 egg yolks**
Add . . . . . **¼ cup sugar**
⅛ teaspoon salt
Pour into 6x10x2-inch baking dish.
Bake at 325° (moderately low) in pan of water for 30 minutes.
Sprinkle over top of custard
½ cup cooky or graham cracker crumbs
Return to oven.
Bake at 325° (moderately low) in pan of hot water for 30 minutes more.
Serve warm with **rich cream.**

Whipped Cream Pie

Makes 9-inch pie

Soften . . . . **1 tablespoon unflavored gelatine** in
⅓ cup cold milk
Beat together:
3 egg yolks
½ cup sugar
⅛ teaspoon salt
Add slowly to yolks, stirring constantly,
1 cup scalded milk
Cook in double boiler until custard coats spoon.
Stir in gelatine.
Chill until mixture begins to congeal.
Fold in . . . **1 teaspoon vanilla**
1 cup heavy cream, whipped
Pour into **baked pie shell**
Top with a layer of **strawberries, raspberries,** or **chopped nuts**
Chill until firm.

Corn Flake Kisses

Makes 36 cookies

Add . . . . . **⅛ teaspoon salt** to
2 egg whites
Beat until stiff.
Add . . . . . **1 cup sugar,** a little at a time, beating while adding
½ teaspoon vanilla
Fold in . . . **2 cups crisp corn flakes**
1 cup coconut
½ cup nuts
Drop from teaspoon onto lightly greased cooky sheet.
Bake at 300° (slow oven) 12 to 15 minutes.
Cool 1 minute. Remove with spatula.

Dogwood Torte

Serves 10

Sift together:
⅔ cup sifted flour
2½ teaspoons baking powder
¼ teaspoon salt
Add . . . . . **1⅓ cups graham cracker crumbs,** finely rolled
Cream together:
½ cup shortening

1 cup sugar
Add.....**1 cup shredded coconut,** finely chopped
1 teaspoon vanilla
Add dry ingredients to shortening mixture alternately with
⅔ cup milk
Fold in...**3 egg whites,** stiffly beaten
Pour into 2 greased, 8-inch layer pans.
Bake at 375° (moderately hot) 30 minutes.
Cool and remove from pans.
Cut each layer crosswise to make 2 layers.
Spread...**2 cups heavy cream,** whipped, between and on top of the 4 layers
Roast.....**½ cup shredded coconut** at 400° (hot) for 3 minutes
Sprinkle coconut over top of cake.

Date Pudding

Serves 6

Beat.....**2 egg whites** until stiff
Combine **½ cup sugar**
4 tablespoons flour
⅛ teaspoon salt
1 teaspoon baking powder
Fold flour mixture into egg whites.
Add.....**½ cup chopped dates**
½ cup chopped nuts
¼ teaspoon vanilla
Pile lightly in well-buttered 7-inch-square baking dish.
Bake at 350° in pan of hot water 30 minutes.
Allow pudding to remain in oven a few minutes after heat is off.
Top with **whipped cream** for serving.

Royal Whip

Serves 6

Wash thoroughly
1½ cups dried fruit (prunes, peaches, or apricots)
Soak fruit overnight in **1 cup hot water**
Cook fruit until soft, in water in which it was soaked.
Press fruit through sieve.
Heat together:
1 cup of the **fruit pulp** and
½ cup sugar
Add.....**¼ teaspoon salt** to
4 egg whites
Beat until stiff.
Fold hot fruit into beaten egg whites.
Chill.
Serve plain or with **rich cream.**

Pineapple Macaroon Pudding

Serves 9

Soften...**1 tablespoon unflavored gelatine** in
¼ cup cold water
Dissolve in
½ cup hot water
Chill until partially set.
Stand....**ready-made macaroon cookies** along all sides of 8-inch-square pan
Cover bottom of pan with layer of **macaroon cooky crumbs**
Add to gelatine
½ cup drained, crushed pineapple
Beat.....**2 egg whites** until stiff
Add gradually, while beating,
½ cup sugar
Fold egg whites into gelatine mixture.
Fold in...**1 cup heavy cream,** whipped
Pour into pan.
Top with **¼ cup macaroon crumbs**
Chill thoroughly. END

Frank will catch it...

Frank groans when his pipe tobacco spills all over the newly cleaned rug. His wife will have to get out the vacuum again. And don't think she won't mention her trouble to Frank—LOUD!

Fred won't...

Fred spills tobacco, too. But he whisks up the mess in a minute, with their new Bissell Sweeper. Fred's wife has the perfect sweep-up team . . . a vacuum for heavy cleaning, a handy Bissell® for quick clean-ups.

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*Reg. U. S. Pat. Off. Bissell's full spring controlled brush.

LET'S TAKE A LOOK AT

Occupation Housewife

By Betty Kramer Duncan

Suppose you were being interviewed for a job and the personnel manager said, "This job has everything! To begin with, you're your own boss. There's no time clock to punch and, to a great extent, you're free to decide what you want to do and when to do it."

"Is it monotonous work?" you ask.

"On the contrary, it has endless variety."

"Is it creative?"

He replies, "More so than any job I know."

"With whom must I work?"

"Only with people you love," he answers cheerfully.

Then, knowing there must be a catch somewhere, you ask, "How much does it pay?"

And he replies, "Oh, I'm sorry—it doesn't pay off in money."

Just as you thought. There's the catch. And as we have decided that money is of the greatest importance to us—so important that it is often the sole measure of man's success—this wonderful job has sunk lower and lower in our estimation. I wonder why the occupation of housewife has deteriorated in the eyes of the world, and particularly in the eyes of the housewife herself.

Perhaps it is because men and women have ceased to think about the real happiness in life and, instead, mistakenly reason that it is wrapped up in "How much money will I make?" and "How much can I buy?" The housewife has been set down in the world's estimation because she doesn't make money and cannot be judged by a pay check. As a result, the romantic housewife is frustrated because she is left at home while more important things (she thinks) are happening in town.

A more realistic view of what characterizes importance would prove her imaginings to be untrue. For if we admit that people are more valuable than material things, and that giving happiness to ourselves and others is the purpose of being, then we must also admit that the *home is the most significant proving ground.*

Here little children, during the first years of their lives, make their most rapid development under the guidance of their mothers. And from infancy to maturity they learn principally by the examples their parents offer. It's as exciting as anything happening anywhere, this creating of personalities. But because it's so commonplace and brings in no money, we overlook how important a parent's obligations are to the whole world's future.

Maybe we like to dismiss our obligations lightly and spend our time in escapist activities. To take homemaking obligations seriously would mean difficult mental work. We would have to study to understand what each new development in our children means; we must be mentally alert to be able to answer their questions intelligently.

We'd have to give up our pet prejudices and teach our children to judge individuals and issues on their own merits. We would actually have to *be* good, not because we are afraid to be bad, but because we know that being good brings happiness.

We couldn't cheat the grocer, or later our child might cheat the stockholder. We'd think twice before telling a little white lie in order to get him to come in the house at once because it might undermine his honesty. It's not an easy job, this living as you would have your children live, but it's an important one.

The rewards of being a housewife are in your own achievements and contributions. You *must know* your job is important. You *must know* that *you* are the hub of family life. Payday comes every day as you see your children developing, your husband contented after a good dinner, and your home a comfortable background for them. If feeling needed is one of the essential ingredients for happiness, in this job it's yours for the asking.

Though you serve for love instead of money, by your work you can raise the standard of living of your family just as surely as if you clerked in a store. Wise

[*Turn to page 152*

"I've lots of time for my children since I got my Ironrite"

***says* Mrs. PAUL WAGNER**
244 S.E. 78th AVENUE, PORTLAND, OREGON

1 "As a professional man's wife with three children, I had my hands full. Ironing was the biggest job of all, what with my husband's office linens on top of the big family ironing. It used to take me from 8 to 10 hours a week, leaving me worn out and too tired to really enjoy my children. But that was before I got my Ironrite Automatic Ironer!

"Doing a big ironing is no trouble at all with my Ironrite. It *irons anything I can wash*, saving me many precious hours each week. Its two open ends and handy Do-all ironing points make it simple to iron the most complicated tucks, ruffles, gathers and pleats, with *nothing to finish by hand*. With my Ironrite, my little girls' things and my husband's daily white shirts, which used to take so much time, are a breeze!

"Yes, thanks to Ironrite, I have lots of time for my children, and for many other things I've been too busy for. Believe me, it's the most valuable appliance I own!

THREE BEAUTIFUL IRONRITE MODELS

MODEL 80. New, improved open-model Ironrite Automatic Ironer for the home laundry. Attractively finished in white enamel. Has Ironrite's *exclusive* "two open ends," Do-all ironing points on both ends, and other famous Ironrite features.

MODEL 85. Beautiful, closed-top Ironrite designed for modern kitchen or laundry. Finished in lustrous, baked white enamel. Opened, hood provides a shelf for finished ironing; closed, it's worktop area.

MODEL 88. Smart, distinctively styled Ironrite with gorgeous hardwood top, built and finished like fine furniture. Harmonizes with your furniture. Choice of rich brown mahogany finish or lustrous honey blonde finish.

2 **"Ironing clean,** crisp shirts for my husband is a simple job with my Ironrite. It saves me hundreds of ironing motions. Why, with its two open ends, I can iron the whole back of a shirt in 10 to 12 seconds—in one operation!

3 **"Ironrite's** Do-all ironing points, mounted in each end of the ironing shoe, act just like hand-iron points. They get into the tiniest tucks and gathers, making such hard-to-iron things as my little girls' dresses easy.

4 **"When I first** got my Ironrite, I thought it would take a long time to become good at it. But with the help of the Home Service Advisor and the free instructions that are furnished, I was ironing like a veteran in no time!

5 **"My advice** to any woman who finds that hand ironing is taking too much of her time and energy is that she look up her Ironrite Ironer dealer and ask him for a free demonstration of this wonderful appliance. She'll never regret it!"

Ironrite

For the name of the nearest Ironrite dealer, see yellow pages of your telephone directory

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Sold with The Norwich Pharmacal Company money-back guarantee. At all drugstores.

How to grow brome seed

You often can double your seed yields, simply by planting in rows. You can use a corn planter or grain drill

By Walter Weiss and Maurice E. Heath
Soil Conservation Service

Brome seed yields, particularly during the first harvest, often can be doubled by seeding in clean, tilled rows.

In Nebraska, where rainfall is limited, clean-cultivated row plantings will give the highest seed yields. For maximum seed yields in Michigan, it is recommended that 30- to 36-inch row seedings be made in August. Under Wisconsin conditions, 30- to 42-inch rows give a definite advantage of two or three times the seed yield as compared to broadcast seedings.

You can seed brome with a corn planter. Julius Lensch, Harlan, Iowa, and Edwin Klopping, Underwood, Iowa, were two of the first to try row seedings in western Iowa. Mr. Klopping harvested 500 pounds of seed per acre from the first seed crop, after an August seeding.

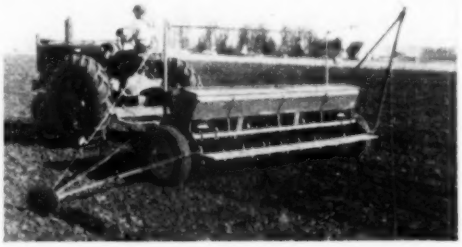
Usually, the regular corn planter plates are used. The corn planter is set to drill at the highest speed. A pointed lath, about a foot long, is placed vertically in the seed box to act as an agitator. Bean plates also have been found to work satisfactorily. In calibrating your corn planter, from 50 to 65 seeds per row foot should be counted. At 50 seeds per row foot, the seeding rate would be around $4\frac{1}{2}$ pounds per acre when using a 42-inch row spacing.

A grain drill will do the job, too. With the discs spaced 7 inches apart, either a 35-inch or a 42-inch row spacing can be used, by covering the openings in between. The seedbed should be firmed with a roller to prevent getting seed too deep when drilling. It may be necessary to release the spring tension on the drill discs to obtain a shallow depth not to exceed $\frac{1}{2}$ to $\frac{3}{4}$ of an inch.

Good, clean bromegrass seed usually will flow through the drill, if you use an agitator. In some cases, it may be necessary to bulk the seed, with about a third to a half oats by volume measure.

What is the best time of the year to make a row planting of bromegrass for seed production? The answer to this question is that bromegrass may be row-seeded either in spring or fall. Don Frakes, Woolstock, Iowa, prefers spring seeding with a grain drill. He follows the

[*Turn to page 64*



For the most seed, plant brome in rows. You can use a corn planter; or block off some of the openings in grain drill

A good stand of brome will yield up to 500 pounds of seed to the acre. Proper plant spacing makes yield go up

You can harvest brome with a combine, if you cut down the air flow and reclean the seed before it is to be planted

Studebaker ¾-ton 8-foot pick-up—½-ton 6½-foot and 1-ton 8-foot also available

Cut your farm expense–get a thrifty Studebaker truck

THIS is the year that a thrifty new Studebaker truck can be a real bank-account help to you and many another farm operator.

It's important now to cut costs—and every inch of a Studebaker truck's rugged structure is designed to save you money on repairs.

Even the front of the husky Studebaker truck frame is reinforced with a rigid, twist-resisting K-member.

Extra savings with automatic overdrive!

The new Studebaker ½-ton and ¾-ton trucks are now available with automatic overdrive—it costs extra but it saves extra on gas. It greatly reduces engine wear, too.

What's more, there's new pulling power as well as new operating economy for you in the stepped-up horsepower and high torque of Studebaker's modernly designed Econ-o-miser and Power-Plus truck engines.

Do your hauling for less money this year and for years to come. Stop in and give the new Studebaker trucks a thorough looking over at a Studebaker dealer's showroom.

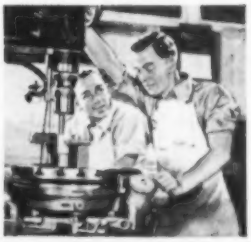
STUDEBAKER TRUCKS

Noted for low-cost operation

A truck just right in size and wheelbase for your farm hauling is available in a husky, handsome new Studebaker—2 ton, 1½ ton, 1 ton, ¾ ton and ½ ton models. "Lift-the-hood" accessibility saves time.

All the family likes this roomy cab! The wide seat has an Adjusto-Air cushion. Doors close securely on tight-gripping rotary latches. Conveniently low floor—no strenuous climbing. Steps are enclosed.

Studebaker pick-up box is double-walled with heavy-gauge metal—tail gate is hinged at center as well as each end—loads slide on and off with ease. Big-visibility rear window for easy backing and parking.



Built by father-and-son teams and other trustworthy craftsmen, Studebaker trucks stand up durably under hard use. 1950 is Studebaker's 99th year of serving U. S. farmers.

Studebaker, South Bend 27, Indiana, U. S. A.

FARM WIVES AGREE!
No other type suds can equal
GREAT new DREFT
for washing milking equipment!

now with 40% MORE CLEANING POWER

for Milk Cans • Milk Pails
Churns • Cream Separators
Milking Machines

Yes! *New* Dreft goes further—does more work! Quickly gets all your milking equipment *shining-clean*... without hard scrubbing! It dissolves milk slime and grease.

Used regularly, new Dreft cuts bacteria counts amazingly low because it dissolves milkstone and prevents more from forming ... prevents loss of butterfat due to milkstone—adds dollars to your dairy income!

now! BEAUTY MILD on your hands, too!

New Dreft is truly beauty-mild ... now actually one of the *mildest suds* in the world. It leaves your hands *softer—smoother—prettier!*

Even in hardest well water, *new* Dreft makes thicker, richer suds. Great for washing dishes ... so clean they *shine without wiping!*

EVERY FARM NEEDS
GREAT new DREFT

How to grow brome seed

[*From page 62*]

practice on his seed production field, drilling the oats first and rolling to firm. Then he cross-drills the bromegrass, using a 35-inch row spacing. The bromegrass is not cultivated until a year later, in early spring, and again in early May, as the heads are beginning to appear.

If you want seed in a hurry and have good summer seedbed moisture, make a summer or early fall seeding—in rows—on fallowed small-grain stubble. Annual weeds do not interfere following the seeding, and a good seed crop can be expected the next summer.

When contouring the rows on rolling ground, it has been found best to surface-drill the bromegrass seed to a depth of ½ to ¾ inch, when using the corn planter. When furrow openers are used, the bromegrass seedlings often are buried with silt during heavy rains. After the contour rows are well established with the growing bromegrass, the rows can be ridged somewhat with a cultivator, to increase the water-holding capacity.

Bromegrass is grown for seed production in cultivated rows for several reasons: (1) To eliminate weeds which otherwise would endanger the chances of producing high-quality or certified seed. (2) To maintain the right number of well-developed plants for the area, rather than a dense sod. Thus, each plant will have enough moisture and nutrients to develop properly. (3) When seeding in rows, roguing for weeds can be done more easily and thoroughly. (4) When early fall moisture is not a limiting factor at seeding time, row plantings made in early fall speed up the seed multiplication program.

Harvesting bromegrass seed is somewhat of a problem, if you've never done it before. The simplest and most common way is with a combine. The combine should be set to cut the bromegrass heads above the green-leaf zone. The wind should be reduced, to prevent seed loss. It is important that, following combining, the seed should be spread over a suitable floor space and turned several times daily the first three or four days, to prevent heating. The seed also can be harvested with a binder, shocked, and then threshed. The latter method reduces the drying hazard. However, there usually are more stems and leaves in the seed.

One of the most difficult operations in handling bromegrass seed—with regular farm equipment—is cleaning. Some farmers report success in removing the stems, leaves, and some of the other inert material by rerunning the threshed or combined seed through a combine set up in a stationary manner. With a little trial and error on sieve and wind adjustments, you can get a satisfactory separation, and obtain sowable seed. And there are available commercial fanning mills that do a precision job in cleaning.

Bromegrass has been found to be one of the best grasses for use in the soil-conservation program on Cornbelt farms. Its root system produces a sod of high quality when managed properly, paying off handsomely in high corn yields. We need lots of seed, to plant more thousands of acres to brome. **END**

What's new in farming

[*From page 10*]

bit lively. If it does, you will do well to make sure the seed you buy has strong germination.

Illinois tests have shown that some varieties of beans fell to a zero germination after 3 years' storage. If storage conditions are poor, or if the beans went in at a high moisture content—over 14 percent—the germination can be poor after only 6 months' storage. If you have any doubts, test the germination now or before you buy your seed.

For more vetch seed. You get more for less. At least, that's what vetch seed tests are showing in Missouri. A seeding of 10 pounds of vetch in rye yielded 477 pounds of vetch seed. But increasing the seeding rate to 20 pounds *lowered* the yield to 437 pounds of seed. A 10-pound rate seemed to be best, since lowering the seeding to 5 pounds also reduced the yield. Rye proved a better companion crop than did wheat or barley.

Five new fruits released. New, hardy fruits have been released by Minnesota research workers. They are the Orient cherry, Golden Spice pear, Oriole apple, and two plums—the South Dakota and the Redglow. These varieties are for farm plantings and are hardy even on the northern edge of the Cornbelt. **END**

Timesaving machine shed door

With this door arrangement, Bernard Marley, Montgomery County, Illinois, solved the problem of storing his combine without removing the elevator and hopper.

A section was cut out above the regular door. This made it necessary to cut the door track. Then the boards were reassembled and made into a smaller door which was hung with hinges at the top.

The roller-door track was put back in place. To support the weight of the roller door, added reinforcement was needed. A 2x6 held in position by blocks was used. The 2x6 isn't nailed, making it easy to remove.—*C. F. Marley.*

"Planting can't wait for Tractor Repairs!"

When it's time to plant corn on his father's 520 acre farm at Knoxville, Iowa, Raymond Mosher has to be sure his equipment is running perfectly. He depends on Phillips *66* Premium Motor Oil for lubrication *plus* engine protection, and avoids possible costly delays due to tractor breakdowns. "With our investment in machinery, we have to use high quality motor oil," says Mr. Mosher.

RAYMOND MOSHER
of Knoxville, Iowa

GET "Lubri-tection"!

Phillips 66 Premium Motor Oil provides Lubrication *plus* Engine Protection!

"Our reason for using Phillips *66* Premium Motor Oil is that we know we are getting a quality motor oil which does a fine job of keeping our motors clean and smooth-running," says Raymond Mosher.

Yes, Phillips *66* Premium Motor Oil *does* help keep engines clean. It contains valuable additives which combat dangerous sludge and varnish. It will help *your* tractor, truck and car operate efficiently and economically because it provides "Lubri-tection". . . that is, lubrication *plus* engine protection. Get it from your Phillips *66* Dealer or Tank Truck Salesman.

PHILLIPS 66 TRACTOR TIRES—Built for Long Life

You get the combined advantages of sturdy construction and scientific tread design when you choose Phillips *66* Tractor Tires. Get them from your Phillips *66* Dealer or Tank Truck Salesman.

PHILLIPS 66 PREMIUM MOTOR OIL

The Pillsbury 4X FEED CLUB

By JOHN D. MARTIN

"Life-cycle feeding" makes more sense every time I have the opportunity to watch a good manager operate. By whatever name you call it, "life-cycle feeding" includes these things:

1. **Nourishing feed for dry cows to prepare them for freshening, for brood sows during gestation, for breeder flocks of chickens and turkeys.**
2. **Good feed and good care *during the growing period* when neglect is all too common—young chickens on range in summer, dairy calves (especially during the first year), pigs and beef calves after weaning.**

Livestock and poultry raisers who look at the entire life cycle of their flocks and herds do not neglect any part of it. They tell me the return they get from feed during so-called "non-producing" periods is as great, if not greater, than at any other time.

They insist that it is bad management—poor economy—to skimp on feed quality, or quantity, during any part of the life cycle. On the other hand, they can prove by their own records that proper attention to life-cycle nutrition reduces mortality and increases the return per animal unit.

Pillsbury Helps the Life-Cycle Feeder

Pillsbury produces several specialized feeds that are money makers for various phases of "life-cycle feeding." Progressive farmers know it pays well to use these feeds as directed and without stinting in vitally important growth and development periods.

Chick starters and growing mashes, both for turkeys and chickens . . . Breeder mash, if you produce either turkey or chicken eggs for hatching . . . Pig and sow feed, or Maxi-Meal . . . Calf starter or calf ration . . . Dry and freshening feed.

Your Pillsbury's Best Feed dealer has some new and important information on "life-cycle feeding," and will be glad to share it with you.

Tips from Feeders

"When giving medicine to livestock by the 'drenching method,' we use an old milking machine teat tube over the end of a pop bottle. This method is safer and much more satisfactory."

Mrs. Donald L. Carey,
R. R. 2, Hamilton, Indiana

"I wax the top of my electric brooder canopy every time I start a batch of new chicks. Chicks cannot roost on it, as they slide off when they try."

Mrs. Philip H. Lauer
West Union, Iowa

If today's egg prices are influencing your decision on buying baby chicks, I'd like to remind you that the chicks you buy in April won't lay a single egg until fall.

By that time, egg prices will be higher, as they have been every fall for the past 20 years or so.

And this note in passing: Right now it looks as if enough of the in-and-outers will be OUT this year to help the price situation by the time snow flies.

THOUGHT OF THE MONTH

He that will not apply new remedies must expect new evils. ***—Bacon***

WE OFFER $25

for every letter used in this column. Send us any practical ideas you have discovered on management, feeding and breeding practices.

Pillsbury's BEST XXXX FEEDS

Pillsbury Mills, Inc.
Feed and Soy Division
Clinton, Iowa

Mills—Clinton, Centerville, Minneapolis, Los Angeles, Atchison, Lima, Ogden, San Francisco, Colton, Sacramento.

You are cordially invited to visit any of them

Grass through calves makes his best feed

[*From page 35*]

As a general rule, light calves are wintered on about 1.5 pounds daily of corn-and-cob meal per hundredweight. Heavier calves receive somewhat less. The heifer calves shown in the picture received more than the usual amount. They got about 8 pounds per head daily during the early part of the wintering period and, by the time pasture season rolled around, they were receiving 17 pounds.

In addition to grain, Watson feeds 1 pound per head daily of supplement (soybean meal, cottonseed cake, and linseed meal), all the corn silage they'll eat, and a little brome-alfalfa hay daily.

While this sort of ration would be too strong on grain for most economical wintering of heavier cattle, Watson realizes that young calves have to make considerable growth—and that takes grain when no pasture is available. However, any heavier feeding of grain would make the calves too fat for most economical use of grass in the spring. They gain about 1 pound daily per head through the winter.

People throw stones only at the tree loaded with fruit.
—French proverb

As explained under the pictures on pages 34 and 35, the calves stay on pasture till midsummer. In addition to nearly the same rate of corn-and-cob meal feeding as received through the winter, the calves also get some oats early in the pasture season to hold down scouring.

While the bunch shown in Picture No. 11 was lacking somewhat in finish, the market at the time did not demand an extreme finish, so they sold quite well.

A second bunch of heifer calves was somewhat younger and weighed less when they went into dry lot. By the time they reached the same degree of finish (early October), the market was demanding much more.

Watson concludes that the light cattle should have been pastured without corn until late summer, and then finished for the December or January market. Then they would have shown more finish.

To make fullest use of grass and still have the calves attain the most desirable market grade, Watson thinks he will have to do either one of two things: (1) Keep them on grass night and day during the early part of the pasture season, and then turn them into dry lot for four or five weeks of grain feeding, or (2) run the calves on grass during the day until later in the pasture season, but keep them in dry lot, with corn, during the night.

Despite any adjustments that may have to be made to best meet the market demands, Watson has complete faith in the value of grass and in the advantage of using it to the fullest extent. He believes that an acre of land in grass is equal to an acre of corn, on 70-bushel land.

When the added benefits of soil fertility and saving of labor, through calves' harvesting their own feed and spreading the manure, are thrown in, the scale tips pretty heavily toward the side of soil conservation and marketing of grass through livestock. That's Watson's philosophy and his way of life. **END**

Tune in HENRY J. TAYLOR, ABC Network, every Monday evening.

–and still baby your budget!

LOOK over this beauty's strapping good looks, and you might easily assume that Buick styling, power, ride and room come at pretty fancy price tags.

But dig into the matter and you'll find it doesn't cost much more—sometimes no more—to really blossom out in a Buick.

Fact is, Buick prices start just a step above the very lowest, and actually are below those of many a "six."

So you can step into spring at a Buick wheel and barely go beyond the new-car budget you set.

You *can* thrill to the lift and life of higher-compression Fireball straight-eight power—and reap the sound economy of valve-in-head design efficiency.

When better automobiles are built BUICK will build them

You *can* move into the room and restfulness and steady going of a Buick—and have the handling ease of shorter bumper-to-bumper length to boot.

You *can* have the soft cushioning of nearly breakproof coil springs on all four wheels, the steadiness of a rigid torque-tube drive sealed against dust, dirt and stones, the ride comfort of extra-large low-pressure tires and wide, wide rims.

Best of all, you can have the whole Buick story—including Dynaflow Drive* if you wish—in any one of a wide array of brilliant models.

All of which means, a visit to your Buick dealer will be well worth your while—just to see how easily *you* can blossom out in the brightest buy of the season.

BUICK *Division of* GENERAL MOTORS

Only Buick has Dynaflow and with it goes:

HIGHER-COMPRESSION *Fireball valve-in-head power in three engines, five hp ratings. (New F-263 engine in SUPER models.)* • **NEW-PATTERN STYLING,** *with bumper-guard grilles, taper-through fenders, "double bubble" taillights* • **WIDE-ANGLE VISIBILITY,** *close-up road view both forward and back* • **TRAFFIC-HANDY SIZE,** *less over-all length for easier parking and garaging, short turning radius* • **EXTRA-WIDE SEATS** *cradled between the axles* • **SOFT BUICK RIDE,** *from all-coil springing, Safety-Ride rims, low-pressure tires, ride-steadying torque-tube* • **WIDE ARRAY OF MODELS** *with Body by Fisher.*

**Standard on ROADMASTERS, optional at extra cost on SUPER and SPECIAL models.*

WHATEVER YOUR PRICE RANGE

"Better buy Buick"

Your Key to Greater Value

LOW FIRST COST when you build with STEEL

● Even if U·S·S Steel Roofing and Siding cost *twice* as much as substitute materials, you'd still find it a good buy. *But it doesn't.*

You'll find the cost per square is right in line with other materials . . . materials that rank far behind it in protection and in long life. And steel has so many other installation advantages that the cost of the completed job actually is *less* than when you use other materials.

For example, steel's strength makes solid sheathing under galvanized roofing unnecessary. There's a big saving in being able to put an open framework of purlins in the roof rather than a solid supporting structure . . . a big saving in material and a big saving in labor.

And, speaking of labor, you don't have to hire skilled workmen to apply U·S·S Steel Roofing and Siding. The labor ordinarily available around the farm can handle the job without special tools or equipment.

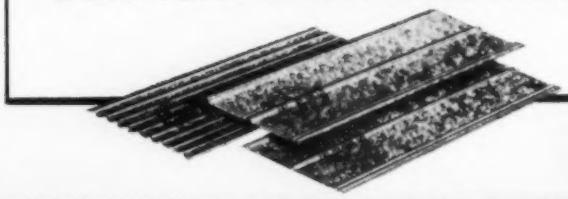
When you add up these savings, you'll see that you can't beat the low first cost of steel. Then consider the many other advantages of using U·S·S Steel Roofing and Siding—certain protection against fire, lightning and vermin . . . a lifetime of service with proper care . . . a low upkeep cost that's often offset by savings in fire insurance. In the long run, steel is actually the most economical material you can use.

Your U·S·S dealer will tell you more about the advantages of building with steel. If you are planning a new structure or a remodeling job, be sure to talk to him first. Never forget that it pays to protect your machinery, livestock, and crops.

You get MORE FOR YOUR MONEY when you build with Steel

CARNEGIE-ILLINOIS STEEL CORPORATION, PITTSBURGH AND CHICAGO
AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
COLUMBIA STEEL COMPANY, SAN FRANCISCO
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S STEEL ROOFING and SIDING



USS

UNITED STATES STEEL

THE FARM

Quizbox

By Gus Larson

Will cows soon thrive on weeds? What caused the treeless prairies of the Midwest? How many inches of tooth paste in a tube? If you think it will be fun to know the answers, let's move on to the quiz.

Score 5 points for each correct reply. If you score (a) 90 to 100 points—tops. (b) 75 to 85 points—excellent. (c) 50 to 75 points—good. (d) 30 to 45 points—just made it. (e) 25 points or below—better luck next time.

1. A new aid for the surgical repair of damaged hearts has been developed at Yale University. What is it? (a) a new heart stitcher (b) respirator (c) artificial half heart.

2. Some folks carry grudges forever. They never forgive and forget. Can these grudge bearers be mentally and physically healthy? (a) yes (b) no.

3. "A woman cannot have more than three babies by Caesarean birth," argues Minnie Hedstrom. Nurse Helen Grant disagrees. Who is right? (a) Minnie (b) Nurse Grant.

4. Mechanical tree shakers are now used in harvesting nuts and prunes. These shakers are usually built on the fronts of tractors. Are the statements (a) true (b) false?

5. What caused the great treeless prairies of the Midwest? (a) Indians burned off land to make fresh pasture for game. (b) Soil was not fertile enough to grow trees.

6. A White House valet once found a chunk of black bread, a roll of sausage, and a pistol in the suitcase of a visitor. Who was the visitor? (a) King George (b) Molotov (c) Churchill.

7. Breast feeding or bottle feeding? Neighbor A thinks bottle feeding is just as good for a baby as natural milk. Neighbor B believes mother's milk is best. Who is right? (a) Neighbor A (b) Neighbor B.

8. Person A said: "Many overweight folks who have foot trouble could be cured by reducing." Person B said: "Extra weight cannot cause foot trouble." Who is right? (a) Person A (b) Person B.

9. A Quizbox reader writes: "Don't cut a child's hair until he is one year old. If you do he will never talk right." Is reader (a) right (b) just superstitious?

10. It's fun to squeeze tooth paste out

of a tube. Can you guess how many inches of paste the average-size tube contains? (a) 25 inches (b) 105 inches (c) 65 inches.

11. When packing to move to the White House, one of our presidents decided to bring his bicycle. He hoped to pedal about the streets of Washington on Sunday afternoons. Who was he? (a) Taft (b) Coolidge (c) Wilson.

12. ACTH is effective against arthritis and rheumatic fever. But only a few can now have the drug because (a) it is scarce (b) doctors disapprove (c) Russians won't export it.

13. The Chinese chestnut is well on its way to becoming an orchard crop in the United States. This variety will replace the (a) American chestnut (b) German chestnut (c) Irish chestnut.

14. If you are like me, you don't like the "tingle" in an arm or leg that has fallen asleep. What causes it? (a) exhaustion (b) pressure on nerve trunk (c) overeating.

15. Many of you have read the news about the new dental drill that just tickles. Does it work by (a) a stream of gas (b) atomic energy (c) radium rays?

16. The cornerstone of the White House had been missing since 1792. It was found recently in the southwest corner of the building by using (a) radium rays (b) seismograph (c) mine detector.

17. The first mechanical clock was built by Gerbert the Monk. This timepiece, which had no hands and told time by striking, was built in the year (a) 990 A.D. (b) 1520 A.D. (c) 1750 A.D.

18. Otis Barton used his benthoscope to (a) set a new record for high flying (b) send his rocket to Mars (c) dive deeper into the sea than any man had ever done.

19. What is your best guess as to the number of motor vehicles (trucks, busses, passenger cars, and so forth) which have been produced since the year 1900? (a) 10,000,000 (b) 54,000,000 (c) as many as 102,000,000.

20. Like popcorn? Having popping troubles? A good thing to do when corn won't pop is to (a) soak corn overnight (b) borrow corn from neighbors (c) seal dry corn in fruit jars with a few drops of water.

Answers on page 127

SUCCESSFUL FARMING

MAYBE IT'S SOMETHING HE DIDN'T EAT!

Next time, ring that bell like chimes, Harry! Maybe that dull, logy feeling comes from irregularity due to lack of *bulk* in your diet. Try the "ounce of prevention" that's in every serving of Post's 40% Bran Flakes . . . those delicious flakes that give you the three *extra keep-fit benefits:*

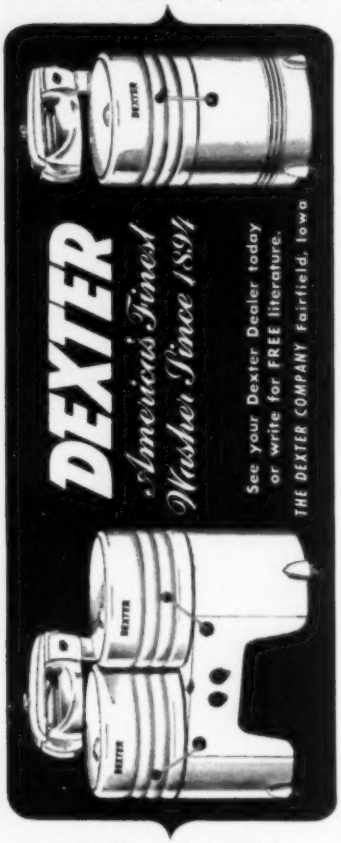
(1) bran to help prevent irregularity due to lack of bulk in the diet
(2) whole-wheat values of these essential vitamins: thiamine and niacin
(3) good source of these important minerals: phosphorus and iron

And you couldn't ask for a better tasting cereal for breakfast. Its fresh, golden-toasted goodness really hits the spot. Ask for Post's Bran Flakes, America's largest selling bran flakes . . . today!

DEXTER TWIN TUB

DOES YOUR WEEKLY WASHING IN ONE HOUR OR LESS

There's no secret why a DEXTER TWIN TUB washes quicker—cleaner—easier. It's the only washer with *two washing tubs.* It washes, rinses, wrings all at the same time — eliminates soaking, hand-rubbing and pretreating. Yes! Double Sudsing with the Dexter Twin turns out a tubful of super-clean clothes — ready for the line — every four minutes. It's TODAY'S BIGGEST WASHER VALUE.



DEXTER SINGLE TUB AN OUTSTANDING VALUE

Unmatched in quality—Dexter is first again! New exclusive features mean lifetime washer satisfaction. •Coro-Vane Agitator—•Turn-Flo Tub—•Super-Century Mechanism—•Gentle-Action Damp Drier give you the extras that make Dexter the finest of fine washers. In all the world — no other washer is so superbly built to give you so much value.

How to get more into your old closets

With a screwdriver plus inexpensive accessories, available in department stores, you can do some tidy remodeling on a closet

Before

Before. Closet offered no place for skirts, slacks. Shoes tumbled about floor, gathering dust; little-worn dresses became dusty. **After.** A good storage unit developed by (1) putting a skirt hanger, a tie rack for belts, and a shoe rack on door; (2) putting good clothes in a dust-free garment bag; (3) keeping bedroom slippers, overshoes off the floor in a covered box

After

After

Before

Before. This man's closet was a jumble of clothes and accessories—ties were always a mess, suits jammed in, shoes were dust-catchers. **After.** To make this closet efficient, this homemaker added (1) a trouser rack to keep pants in press; (2) a tie rack; (3) a shoe rack; and (4) a low shelf under the suits so the Mister doesn't have to toss heavy luggage up high

More on page 79

Have clothes that look twice their price!

IT'S EASY WITH A NEW SINGER SEWING MACHINE!

• **Stitch forward or backward,** enjoy all the features of a full-size SINGER in this Featherweight Portable. Most popular model ever. Complete with case.

IF YOU LOVE the smart styles and expensive details that come with top price tags—here's how to have them without splitting the seams of your budget!

Make your clothes on a new SINGER* Sewing Machine. Smoothest-stitching ever! Cabinet models from $147.50, portables from $89.50. See them today.

Complete 8 lesson Home Sewing course given with purchase of machine.

• **You can't beat SINGER** for dependability. World favorite 99 years. Choose any model—you'll *always* be able to get service and supplies from any SINGER SEWING CENTER. Above: modern desk.

• **New Blind Stitch Attachment** fits *any* SINGER Machine—sews "invisible" hems. Also available: Buttonholer, Zipper Foot, many other time-saving attachments.

• **Lovely cabinets!** Whether your home is modern or traditional, you'll find a SINGER style that fits perfectly. Many with matching stools, as above.

Polka-dot taffeta at left is made from Simplicity Pattern #3168.

• **Fill all your notion needs** from needles to zippers, at your SINGER SEWING CENTER. And get the new "SINGER Sewing Book" with 1000 illustrations on how to handle every sewing detail.

FOR YOUR PROTECTION

SINGER sells and services its Sewing Machines, Vacuum Cleaners, and other products only at SINGER SEWING CENTERS, identified by the red "S" Trade-mark and the "SINGER SEWING CENTER" emblem on the window, and never at department stores, or other outlets.

At left is SINGER SEWING CENTER at 111 North 29th Street, Billings, Mont. Hundreds more from coast to coast. For address nearest you, see classified phone directory. Or write SINGER SEWING MACHINE CO., Dept. S-14, 95 Liberty St., New York 6, N.Y.

SINGER SEWING CENTERS

THERE'S ONE NEAR YOU TO SERVE YOU

*A Trade-mark of THE SINGER MANUFACTURING COMPANY

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2 GREAT COMPANIES JOIN FORCES FOR YOUR COMFORT

Englander
AMERICA'S MOST LUXURIOUS MATTRESS

GOODYEAR
THE GREATEST NAME IN RUBBER

The New Sleep!

AN *Airfoam** MATTRESS

- NON-ALLERGIC, DUSTLESS
- COOL SLEEPING
- ALWAYS ODORLESS
- NEVER NEEDS TURNING
- HELPS PREVENT STRAINS, ACHES
- NEVER SAGS OR LUMPS

Also available in wood rose stripe

All the proof you need. Just press down on Airfoam. Feel how it molds itself to your hand, responds with a buoyant "uplift."

No other foundation looks like this. Joined only through the middle by flexible steel bands, each spring in the upper half is free to adjust individually to every move. Lower part acts as a unit, supports body in the manner doctors recommend.

...at a new low price with a 20-YEAR guarantee!

Now you can get an Englander Mattress of Goodyear's Airfoam for $59.75

Think how it's going to feel! You float off to sleep on a foamy puff of millions of tiny air cells. Aches and strains and the cares of the day disappear. You wake up and life is wonderful. And all at this new low price because Englander and Goodyear pooled their forces. It's the new sleep. It's Airfoam. How soon are you going to have it?

When used with Englander's special Red-Line* Foundation, whole unit guaranteed for 20 years

No ordinary box spring will do for Airfoam. To insure the full comfort and long life built into the mattress, Englander has designed a special Red-Line foundation. So scientifically is it matched to the Airfoam mattress that mattress and foundation are guaranteed for 20 years against any defects in material or workmanship when used together.

Both for the price of a conventional mattress and box spring $119.50

Other Englander Red-Line mattresses and companion box springs (both twin and full size) from $39.75 to $79.75.

SLEEP SHOW

Only Englander makes an Airfoam Mattress

*TM The Englander Company, Inc.

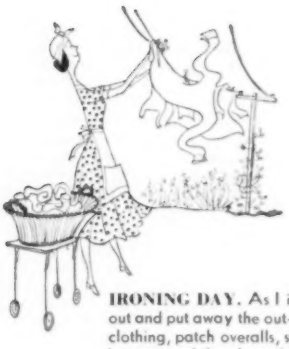
*TM The Goodyear Tire & Rubber Company

Spring house cleaning is old-fashioned

By Joan Kane

We threw out the coal stove which filled our home with soot and grime during the winter and had to be taken down in the spring. We no longer store seeds for spring sowing in our house. And I'm all through with feather beds which must be taken apart and washed each spring!

I've put myself on a year-around plan that has eliminated such heavy peak loads as house cleaning. Instead, my house cleaning does itself, falling in naturally with my regular, weekly cleaning. [*Turn to page 74*



WASHDAY. I restore order to the basement and clean it. When my laundry is light, I toss in a blanket, bedspread, curtains, or, if drying space is at a premium, a rug

IRONING DAY. As I iron, I sort out and put away the out-of-season clothing, patch overalls, sew on the buttons, and do other odd mending jobs that I find while I'm ironing

BAKING DAY. I bake cakes, cookies, and pies for immediate eating and also for stocking in my freezer. I also use this day for gardening in season, and for canning

SHOPPING DAY. I arrange this to get in on the "weekend specials." I clean the kitchen that day, too. I wash a cupboard, woodwork, or walls along with routine cleaning

UPSTAIRS CLEANING DAY. I clean as usual, then focus attention on one room per week: Wash and wax floors; wash the windows; clean drawers, closets, bedsprings

5 Triple-Strength BOWL COVERS

in beautiful, translucent colors

only 25¢ and one CLIMALENE box top

Save Money—Food!

We make this sensational offer to introduce you to CLIMALENE, the remarkable cleanser and soap saver. Used with soap or detergent, it gives *extra-cleaning power* for whiter, brighter clothes, sparkling dishes and pans.

CLIMALENE cleans all dairy equipment—milking machines, cream separators *lightning fast, easier*. In any water—hard or soft. It cuts grease, cleans away milk slime—no hard scrubbing!

This is the longest-wearing, most attractive bowl cover set you've ever seen—waterproof, greaseproof and stainproof—easy to clean. Don't delay! Order today!

VALUABLE COUPONS for you INSIDE EVERY PACKAGE

CLIP: mail this coupon now!

The Climalene Company
1186 9th Street, S.W., Canton, Ohio

Please send me_____ sets of Climalene's bowl covers. I enclose 25c in coin and 1 Climalene box top for each set ordered.

Name_____

Street_____

City-State_____

50CM6

BOWLENE Keeps Toilets Sparkling White

Drifts of snow-white coconut—like a pretty spring bonnet—top this newsy Calumet cake. With Calumet's dependable double-action to help you, *your* cake will be just exactly as high, light, and luscious! And how you'll blush with pride when you see what Calumet does for your biscuits and hot breads!

Pretty enough for the

EASTER PARADE

A highlight of your Easter day—this lovely, spring-bright Calumet cake!

As easy and sure-to-succeed as it is beautiful. Every crumb will be airy-light and velvet-soft—if you use Calumet Baking Powder.

It's the wonderful double-rising action—first in the bowl, later in the oven that gives Calumet cakes that special feathery, tender texture.

You'll notice the same fine, even tenderness in your Calumet biscuit and hot-bread baking, too. You'll see right away why more women buy Calumet than any other baking powder. Remember to get a can today!

EASTER GLORY CAKE

Preparations. Have the shortening at room temperature. Line bottoms of pans with paper, then grease. Use two round 9-inch layer pans, 1½ inches deep. Start oven for moderate heat (375°F.). Sift flour once before measuring.

Ingredients:

- 2¼ cups sifted Swans Down Cake Flour
- 3 teaspoons Calumet Baking Powder
- 1 teaspoon salt
- 1½ cups sugar
- ½ cup shortening
- *Milk (see below for amount)
- 1 teaspoon vanilla
- 2 eggs, unbeaten

*With butter, margarine, or lard, use ⅞ cup milk. With vegetable or any other shortening, use 1 cup milk.

Now the Mix-Easy Part! (Mix by hand or at a low speed of electric mixer. Count only actual beating time or beating strokes. Allow about 150 full strokes per minute. Scrape bowl and spoon often.)

1. Sift flour once; measure into sifter; and add baking powder, salt, and sugar. Set aside.
2. Place shortening in mixing bowl and stir just to soften. Sift in dry ingredients. Add ¾ cup of the milk and vanilla and mix until all flour is dampened. Then *beat 2 minutes.*
3. Add eggs and remaining milk and *beat 1 minute* longer.

Baking. Turn batter into pans. Bake in moderate oven (375°F.) 25 minutes, or until done. Cool.

Frosting. Spread seven-minute frosting between layers and on top and sides of cake. Sprinkle with Baker's Shredded Coconut. Decorate with several groups of vari-colored jelly beans to simulate eggs in nests.

(All measurements are level)

CALUMET BAKING POWDER

Double-acting...for Double-sure Success!

A product of General Foods

Spring house cleaning

[*From page 73*]

The plan I tailored for myself is completely flexible. When the violets bloom, I'll hike down to the bridge with the children to see them—it's part of my plan!

This is how I made my plan: I started with the schedule I already had—Monday, wash; Tuesday, iron; Wednesday, bake; Thursday, clean the kitchen and buy groceries; Friday, clean upstairs; Saturday, clean downstairs. And I kept on, Monday through Saturday, going through my daily routine of dusting, running the carpet sweeper, picking up papers, and making beds. Every day, as I worked, I tried to think of a better way to do each job faster.

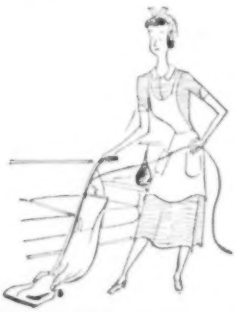
Then, as I went along each day I did one additional job—not a large one, but one compatible with my time and energy. I selected jobs that just naturally came after one another. I put my schedule on paper, revising it as I found other methods more practical. By keeping up with my house cleaning every day, I found it didn't take as long to do the jobs.

Day by day, I spent a little extra time house cleaning. I decided I preferred that to the awful days and nights I used to spend cleaning before guests arrived or for solid weeks every spring and fall.

I'll have to admit that it took me a while to get on to the plan. There were plenty of days when I had to give myself a shove to get my extra job done. But I soon saw I had more time to spend with the children, time to take an active part in community affairs, time to read and sew, time to raise and care for the flowers I'd always wanted. And my house was always presentable.

The thing I would like most to emphasize is that *you* must make *your* plan—then make it work for you! My plan fits me; it fits the way I like to do my work. Perhaps *you* like to clean house on Monday and do *your* weekend shopping on Friday. The important thing is to tailor the plan to your own needs.

I used to salve my conscience in the spring, when everyone else was house cleaning, by shampooing my upholstery and rugs and repairing and renovating furniture. But now I find that these, too, are a part of my plan. When my neighbors gather and talk about spring house cleaning, I sit smugly by and tell them I just don't do it.



Downstairs cleaning day. After the regular cleaning, I give one room special attention: Dust under rugs; wash windows; clean furniture, floors, walls, ceilings. END

Go ahead—put your feet up!

You can't scratch or mar this furniture. Today, you can plan a home that is comfortable, beautiful, and gracious—and practically indestructible. (See page 42.) The stores listed below cooperate with the Successful Farming Home Planning Service. Visit the one nearest you for help in planning your home and furnishings.

Illinois
Bloomington.....Livingston's
Champaign.....Robeson's, Inc.
Danville.....Block & Kuhl Co.
Decatur.....Block & Kuhl Co.
Galesburg.....Block & Kuhl Co.
Peoria.....Block & Kuhl Co.
Quincy.....Block & Kuhl Co.

Indiana
Indianapolis.....L. S. Ayres & Co.
South Bend.....Robertson Bros.

Iowa
Cedar Rapids....Smulekoff's
Des Moines.....Younkers
Fairfield.....Bradshaws
Sioux City.....T. S. Martin Co.

Kansas
Coffeyville.....Long-Bell Lbr. Co.
Liberal.....Long-Bell Lbr. Co.
Pittsburg.....Long-Bell Lbr. Co.
Salina.....Long-Bell Lbr. Co.
Topeka.....Karlan's
Wichita.....Hinkel's

Michigan
Lansing.....J. W. Knapp Co.

Minnesota
Albert Lea.....Skinner Chamberlain
Mankato.....Landkamer Bros. Co.
Minneapolis.....L. S. Donaldson Co.
St. Cloud.....Herberger's

Missouri
St. Louis.....Stix, Baer & Fuller
Springfield.....Heers, Inc.

Nebraska
Grand Island.....Wolbach's
Lincoln.....Gold & Company
Norfolk.....Ballantyne's
Omaha.....Orchard & Wilhelm

New York
Albany.....W. M. Whitney & Co.
Geneva.....Lauer Furniture Co.
Rochester.....McCurdy's
Watertown.....Household Merit

Ohio
Ashtabula.....Carlisle-Allen Co.
Dayton.....The Rike-Kumler Co.
Mansfield.....The M. O'Neil Co.
Springfield.....Wren's

Oklahoma
Clinton.....Long-Bell Lbr. Co.
Enid.....Long-Bell Lbr. Co.
Oklahoma City...Long-Bell Lbr. Co.
Tulsa.....Long-Bell Lbr. Co.

Pennsylvania
York.....Wiest's

South Dakota
Huron.....Fullerton's
Sioux Falls.....Johnson's, Inc.

Wisconsin
Manitowoc.....Boston Store
Milwaukee.....Gimbel Bros.
Oshkosh.....Boston Store

Go Buy the Name...
Deepfreeze
FARM FREEZERS

LARGER CAPACITIES! LOWER PRICES!

The World's First and Finest Farm Freezer...

Here's a fine edition of a famous best seller ... the Deepfreeze farm freezer. Saves you time ... saves you money! Buy in *quantity* when price and quality are right. You can cook and bake ahead ... store and freeze ready-cooked foods. Shop just once or twice a month! Send for "Homemaker's Manual" ... suggestions on homemaking and better living. Send 10c, name, address, to Dept. SF-450, Deepfreeze Appliance Division of Motor Products Corp., North Chicago, Ill.

De Luxe Model C-20
20 Cu. Ft.
Holds more than 700 lbs. of assorted frozen foods.
$549.95
Retail Price Delivered and Installed anywhere in the U.S.A.
There's a model for every family ... from $229.95. See the all new model C-16 ... holds more than 560 lbs.

The New **Deepfreeze** *Refrigerators*

See the magnificent new Deepfreeze refrigerators ... where beauty of design encloses a wealth of features. The *only* refrigerator with the *exclusive* Deepfreeze Freezer Compartment. Five models from $199.95.

The New **Deepfreeze** *Electric Ranges*

See the beautiful *all-new* Deepfreeze electric ranges ... You can buy them with confidence in the performance guaranteed by this famous household name...Deepfreeze! There are four beautiful models from $159.95.

Go Buy the Name... **Deepfreeze**
FARM FREEZERS • REFRIGERATORS • ELECTRIC RANGES

© 1950 DEEPFREEZE APPLIANCE DIVISION, MOTOR PRODUCTS CORPORATION

How to dry-clean your house

Take advantage of products which will simplify your house cleaning

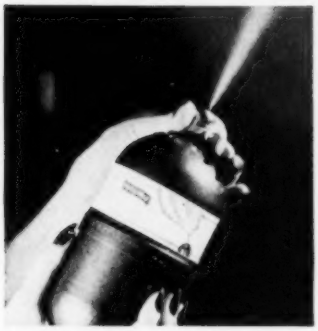
Don't look now, but there's a robin just outside your door, and someone is taking down the storm windows—a couple of sure signs that spring-cleaning time is here. But before tackling your cleaning projects, go into town to get some supplies. Your trip will be fully justified, for laborsaving cleaners now on the market will practically "dry-clean" your home.

For instance, now you can buy a wax remover for tired, worn floors. It will remove old wax, imbedded dirt, and will restore original beauty and color to surfaces dulled by dirt. It will make surfaces bright and fresh, ready for rewaxing or repolishing. For the floors, you simply

[*Turn to page 78*

Floor waxes that will end scrubbing. You just wipe them on and wipe them off, and the floor will be clean and have a soft glow

Plastic linoleum finishes that will end waxing. Paint on the durable, clear protective coatings to preserve all your linoleum



Insecticide bombs will kill flies, ants, moths, and other pests. Spray the room with the bomb and keep it closed several hours

Special rust removers will take off heavy, yellow rust streaks from bathtubs and sinks. You use them like a scouring powder

Mildew preventers now come in the form of a salt that absorbs moisture. Just hang the bags in closets, basement, laundry

Glass wax will clean windows, mirrors, chrome, or silver easily. Simply wipe it on, let dry, and wipe off. It leaves no streaks

"We compared 7 ranges—then chose Caloric"

*Typical of thousands of enthusiastic comments by Caloric owners.

Compare Caloric with any LP-Gas range on the market and you'll agree that this is the range for faster, easier cooking beyond city gas mains. Caloric offers you extra value in beauty, sturdy construction and convenience features. Let your LP-Gas dealer show you the new Caloric models, or write Caloric Stove Corporation, Widener Bldg., Phila. 7, Pa.

1 **"America's Easiest Ranges to Keep Clean"** have porcelain enamel finish, inside and out. All white porcelain is acid-resisting. Seamless porcelain oven and broiler.

2 **Flavor-Saver Dual Burners** speed cooking, save gas, hold flavor. Replacement guaranteed for life of range.

3 **Hold Heat Oven, Veri-Clean Removable Broiler** assure finer baking results, delicious flame broiling.

You may have any Caloric factory-equipped for "Pyrofax" Gas or other LP-Gases ("bottled" gas). "CP" features, optional, give automatic cooking.

Ultramatic Caloric Automatic Gas Ranges

AMERICA'S EASIEST RANGES TO KEEP CLEAN

Is your child's future worth a Wurlitzer Piano?

A growing boy whose mind is growing, too

Perhaps your son may choose a career far outside of music. But of this you may be sure. What he learns at the Wurlitzer Piano will help him all his life, even though you do not expect him to be a Paderewski.

He is going to have the fun of music in his heart and hands, no matter where life spots him. If things go well, it will be an asset. If things break a little tough, it will be a comfort.

The boy who grows up with a Wurlitzer Piano also grows in perseverance, concentration, coordination. He acquires self-discipline, self-confidence, poise—the ability to make other people happy—qualities that do so much to assure youthful popularity and future success.

A Wurlitzer Piano can help him gain self-assurance, popularity, success.

Available in mahogany, walnut or blond —all with matching plastic fabric.

Remember that Wurlitzer makes a complete line of electronic organs, too—including organs for churches and schools, and a brilliant new instrument for the home.

GREATER VALUE BECAUSE OF GREATER VOLUME

Like a good education, a Wurlitzer Piano is an investment in your child's future. And the size of the investment is less than you think. Wurlitzer is able to give you far more piano for far less money for a very simple reason. *More people buy Wurlitzer Pianos than those of any other name.*

WURLITZER

World's Largest Builder of Pianos and Organs Under One Name

THE RUDOLPH WURLITZER COMPANY, EXECUTIVE OFFICES, CHICAGO, ILLINOIS

Dry-clean your house

[*From page 76*]

spread on the wax remover, let it stand a minute, then wipe it off with a damp cloth. For dewaxing furniture, you pour the wax remover on a damp cloth and rub quickly over the surface.

And you'll give three cheers for the new 3-way furniture polish. It works as a spot remover, a polish, and general tune-up for wood surfaces. It will remove heat and water spots, paint, ink, nail polish, and cloudiness from varnished, shellacked, and lacquered surfaces.

To use this laborsaver, you merely moisten a cloth with it, apply to the spot, and rub with the grain of the wood. However, the polish is not a cure-all for major scratches, burns, and blemishes. Any mars which have penetrated the surface of the wood cannot be removed without removing the finish.

You'll say "Hurrah" for the wonderful foam cleaners, too. They take care of home cleaning of upholstery. Just whip up a suds with an egg beater and rub the suds on the upholstered surfaces. Next, wipe the surface with a damp sponge, and the cleaning is done.

Your cleaning campaign undoubtedly takes in cleaning walls, woodwork, floors, Venetian blinds, leather or leatherette finishes, refrigerators, and stoves. For them, get a bottle of the new painted-surface cleaner, and forget about rinsing, rubbing, and drying. Saturate your cloth in the cleaner and swish it over the surface with firm, easy strokes. The dirt wipes off—no rinsing is needed.

Did you ever think you'd see the day when you sprayed a coat of wax on your furniture, gave it a rub, and the furniture was waxed? Today you can buy a can of household spray wax which will do just that for you. Press the top of the can and a fine spray of the wax comes forth. Rub it in, and your furniture is waxed. No other work than that.

Still on the subject of furniture polishes, don't overlook a bottle of plastic furniture polish. It is durable and especially desirable for furniture that gets very hard wear. Just paint it on and let it dry. Your furniture will have a high gloss that will last for months.

For your war on moths, manufacturers have put out modern moth killers. They are plastic cases holding crystals. Simply hang the containers from a clothes rod or a convenient hook in your clothes closet. The moths won't last long.

Wood tints will bring back the beauty of dull, faded furniture and woodwork. Tints come in oak, maple, mahogany, walnut. **END**

How to get more into your old closets

[*From page 70*]

Before

This girl's closet was one of those deep ones. In fact, deep enough for two clothes rods. But two were inefficient—the back row was just too hard to reach

After

Improvements of about 100 percent were made by (1) replacing the lengthwise rod with a telescoping clothes-carrier (allows total use of the depth, pulls out for quick selection of clothes); (2) putting a skirt hanger, a tie rack for belts and scarves, and a shoe rack on the door

Do you have a question?

Through our Farm and Home Service Bureau, *Successful Farming* offers you individual, personal-letter help with your individual problems.

This service is offered to you without any charge whatever.

In order that we may form an accurate picture of your questions, outline all details clearly when you write.

Address your inquiry to The Farm and Home Service Bureau, *Successful Farming*, Des Moines 3, Iowa.

Keep your WHOLE mouth WHOLESOME!

Your mouth and breath will stay more wholesome—sweeter, cleaner—when you guard against tooth decay and gum troubles *both*. So don't risk halfway dental care. Take this vital precaution—use *doubly-effective* Ipana care* for healthier teeth, healthier gums—better all-around protection for your whole mouth!

Fight tooth decay and gum troubles Both!

Only one leading tooth paste is designed to give you this double protection*

For a healthier, more wholesome mouth, dentists warn: *protect your teeth and gums BOTH.*

For gum troubles not only cause more tooth losses than decay itself. Unhealthy teeth and gums BOTH breed unpleasant breath.

So fight tooth decay and gum troubles, too—with *doubly-effective* Ipana care.

No other dentifrice has proved more effective than Ipana in fighting tooth decay. *And no other leading tooth paste* is specially designed to stimulate gum circulation—promote healthier gums.

Get Ipana's double protection—help keep your *whole* mouth *wholesome!* You'll like Ipana's wholesome, refreshing flavor, too.

***Here's doubly-effective Ipana care**

1. Between regular visits to your dentist, brush all tooth surfaces with Ipana at least twice a day. **2.** Then massage gums the way your dentist advises. Ipana's formula reduces tooth decay, promotes healthier gums—helps keep your *whole* mouth *wholesome!* Get Ipana today.

Healthier teeth, healthier gums... IPANA for Both!

Before You Decide

See

Waterbury FURNACES and Air-Conditioners

FOR GAS OIL COAL

If you want dependable heat all winter long—if you want true fuel economy—then you want a Waterbury! Designed with care, built with precision, their outer beauty is reflected in the quality of what is under the casing.

See Your Waterbury Dealer

Waterbury

More Than 42 Years in Warm Air Heating
THE WATERMAN WATERBURY CO.
1184 Jackson St. N. E. • Minneapolis 13, Minnesota

Please send me "Seven Steps to Indoor Comfort" and the complete folder of Waterbury Units, also the name of my nearest Waterbury Dealer. This request must not obligate me in any way.

NAME _____

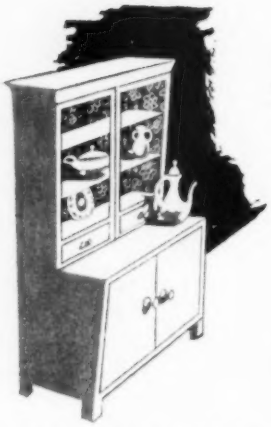
STREET OR RFD _____

CITY _____ STATE _____

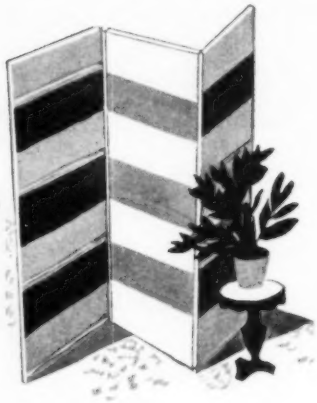
It's What's Under the Casing that Counts!

Ways with wallpaper

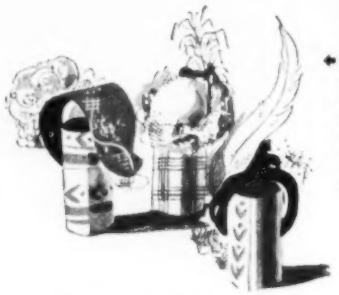
By Virginia Blodgett



You can work magic with bits of leftover wallpaper, or small pieces of exotic papers that would be too expensive to use in larger portions. For instance, brighten a china cabinet with a colorful wallpaper interior. Use a paper in a solid color with patterned walls, and a patterned paper with plain walls

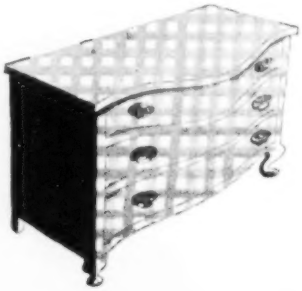


Here's a good way to divide a room into two parts, or to conceal one portion of the room: Paper a folding screen with the same paper you have on the walls. Or if the walls are plain, you may paper the screen in any type of paper. A scenic paper is good, or try a bold stripe. For a finished look, shellac it



Keep closets tidy with a place for everything. If you find keeping your hats in boxes wrinkles the veiling, make hatstands for each of them. You'll need empty oatmeal boxes (one for each hat) and bits of wallpaper. Paste the wallpaper around the boxes, line them on a shelf, and perch a hat on each

Leftover wallpaper makes attractive and practical place mats for your table. Cut them out with pinking shears for a finished edge. A coating of shellac will make them washable with a damp cloth. For added durability and a thicker mat, glue them to a backing of cardboard or to an old cork mat



An old chest of drawers can become a real "show-off" if papered with a bright plaid. Sand the wood until smooth. Then make a pattern from newspaper the exact size of drawers, top, and sides. Leave about an inch to turn under at corners. Cut the wallpaper from the pattern and glue to chest. When paper is thoroughly dry, shellac

More on page 153

Available with New Super-matic Drive†—Only Cars with "Step-Down" Design

Most Room! Best Ride! Safest! "The New Step-Down Ride"

Best ride? Yes! Free-flowing, low-built design quickly tells you that the New Hudson has the lowest center of gravity in any American automobile—and this right along with full road clearance! As a result, you know instinctively that this thrilling motor car hugs the road more tenaciously than any other automobile, and is therefore America's best-riding and safest car!

Safest? Absolutely! Hudson's low center of gravity makes it a steady, sure-handling car. And for even greater safety, Hudson's Monobilt body-and-frame*, an all-welded, all-steel single unit of construction, rides you down within a base frame (shown in red above) with box-section steel girders completely encircling and protecting the passenger compartment—even outside the rear wheels! *Trade-mark and patents pending.

Available only in Hudson because Hudson is built differently

MOST ROOM in any car at any price, and with all this you get, in Hudson, America's best-riding, safest car!

Your very first glance inside the New Hudson shows you that the seats are positioned not only ahead of the rear axle, but entirely ahead of the rear wheels.

This permits full use of body width, and as a result, the sensational New Hudson of normal exterior width brings you seat cushions that are *up to 12 inches wider* than those in cars of greater outside dimensions! Even the door controls and arm rests in Hudson are set in recessed door panels so that they do not interfere with passenger room.

You'll see, too, that Hudson's exclusive "step-down" design, with its recessed floor, brings vital space into the passenger compartment, instead of wasting it under the floor and between frame members as is the case in all other cars!

This provides, in Hudson, more head room than in any mass-produced car built today.

But Hudson's fabulous room is only part of the story. We invite you to read, to the left, why "The New Step-Down Ride" is America's best and safest ride—then see your Hudson dealer—soon! Hudson Motor Car Company, Detroit 14.

HUDSON

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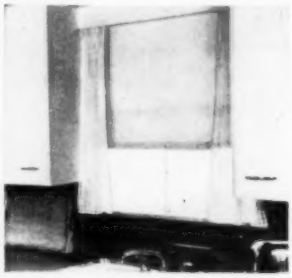
MOST ROOM! . . . BEST RIDE! . . . SAFEST!

ONLY HUDSON, THE CAR WITH "THE NEW STEP-DOWN RIDE", BRINGS YOU THESE ADDITIONAL FEATURES . . . ***Chrome-alloy*** motor blocks which minimize wear and reduce upkeep costs • ***Triple-Safe Brakes***—finest hydraulic system with reserve mechanical system on same pedal, plus finger-tip-release parking brake • ***Fluid-Cushioned Clutch*** • ***Wide-arc vision*** with Curved Full-View windshield and rear window • ***Weather-Control†*** — Hudson's heater-conditioned-air system • ***Super-Cushion tires*** • ***Safety-Type wide rims*** • ***Center-Point Steering*** and more than 20 other high-performance, long-life features that help make "step-down" designed Hudsons leaders in resale value, coast to coast, as is shown by Official Used Car Guide Books! †Optional at extra cost.

What's new in homemaking

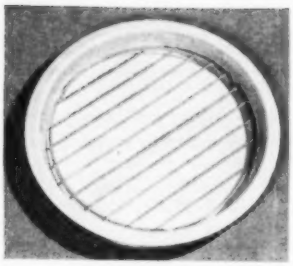
[*From page 24*]

Sharp knives that stay sharp! These stainless-steel knives are guaranteed to keep their razor-sharp edge for three years, without sharpening. Manufactured by a "frozen heat" method, the knives hold their sharpness from 5 to 60 times as long as the best available conventional cutlery blades. From 69 cents to $6, in open stock at department, hardware, gift, and cutlery stores, or write *Robeson Cutlery Co., 36 Main Street, Perry, New York.*



Plastic shades. You'll be amazed at the ruggedness of these Vinyl plastic-film shades. Finger marks and smudges can be wiped off quickly with a damp cloth. Shades are waterproof and weather-proof and are crack-, tear-, fade-, and flame-resistant. Won't ravel or fray when they whip in the wind. In white, green, ivory, or tan; standard widths of 36, 42, or 48 inches. *Plastishades*, in department or furniture stores, $1.59-$1.79.

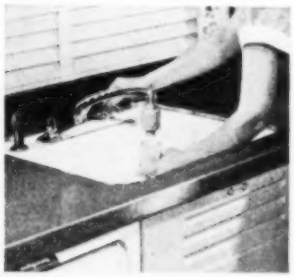
Utility cabinet. Inner-door shelves for spices and condiments are special feature of this new utility cabinet. Designed for use in kitchen, bathroom, or nursery, cabinet has rounded corners, four deep permanently attached shelves. Inner shelf doors have rubber bumpers. Cabinet has glossy white, durable, baked-enamel finish, an extra large chrome-plated handle, and about 9 cubic feet of storage space. It is 67 inches high, 20 inches wide, and 13 inches deep. Available at department and hardware stores, or $24.95, plus postage, from *Cutler Metal Products Company, 1025 Line Street, Camden, New Jersey.*



Broil more foods with this small-size broiler pan. The steel pan is completely coated with durable heat-tested glass. Even stubbornly encrusted foods can be removed easily by soaking; no scouring or scraping. The pan alone can be used for baking potatoes or as a shallow bake pan. *Broil-Moore* broiling pan, available in gray, $1.15, or white with red trim, $1.45, is found in department and hardware stores.

A nonsplash spatula will turn your foods easily in the frying pan. Bottom of spatula slides under food, top clasps it firmly, and over it goes. Blade is of stainless steel. It helps amateur cooks achieve

professional-looking fried foods. At department, hardware stores, or $1, postpaid, *Buckly Culinary Products, Inc., 315 N. Aberdeen Street, Chicago 7, Illinois.*



Sparkling clear water is assured with "Aqua-Mite" water filter. Objectionable tastes, odors, and organic matter are removed with filter. Fits ordinary faucets, lasts a lifetime. Found in department or hardware stores. Direct, $6.95, postpaid, from *Mansfield Aqua-Mite Filter Co., 3029 N. Austin Avenue, Chicago, Illinois.*

for EASIEST speed control ...try HAMILTON BEACH!

now with Pyrex Ware bowls!

PYREX MIXING BOWLS! *Mix, bake, serve,* and *store* in the *same* bowl! Save time, save dishwashing, with *always-useful* Pyrex Ware. Compare!

EASIEST SPEED CONTROL

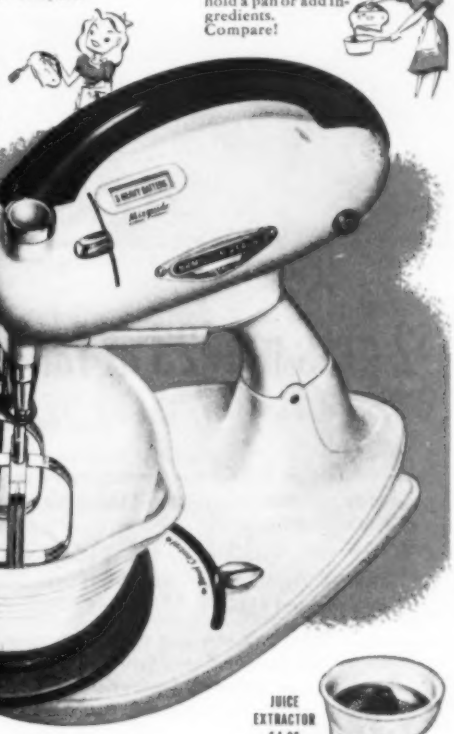
MIXGUIDE puts 10 tested speeds right under your thumb, right under your eye—magnified for flash reading. Compare!

EASIEST OPERATION

The hand that holds the mixer sets the speed. Leaves your other hand free to hold a pan or add ingredients. Compare!

EASIEST PORTABILITY

New, lighter beater unit glides off the stand for use *anywhere.* No triggers, catches, or latches. Easy off, easy on . . . with *one* hand. Compare!



$34.25

($34.90 Denver—West.) Includes two Pyrex bowls and extra single beater.

BOWLS NOW PYREX!

JUICE EXTRACTOR $4.25 ($4.35 Denver and West.)

EASIEST JUICING

Juice, strained free of seeds and pulp, flows directly into serving glass. Nothing extra to wash. Extractor lifts out for easy cleaning. Rustless. Compare!

EASIEST BOWL CONTROL

Shifts ever-turning Pyrex bowl while beaters revolve. Gives even mixing without stopping the motor or touching the beaters. Compare!

TRY HAMILTON BEACH! There *is* a difference in food mixers. So get the most for your money. Compare them *all* and you'll say Hamilton Beach is for you. Of all food mixers, it's *easiest to use!* Hamilton Beach Co., Div. of Scovill Mfg. Co., Racine, Wis.

Made by the makers of top-value Hamilton Beach Vacuum Cleaners

● Mr. Carr's electric pig brooder also enables him to schedule litters for off season, to get the highest market prices.

"$2 gets me $25 at farrowing time"

—says Bill Carr, Newbury, Ohio

Before Bill Carr put in an electric pig brooder, he lost a pig or two from every litter. That was a "normal" loss, but he didn't like it!

So he talked to the power company man about electric brooders. Together they figured what wiring he'd need, and what size and type of bulb.

"I haven't lost any pigs from exposure since I've had that electric brooder," says Mr. Carr. "It's a real money-maker! Electricity for each brooding period costs under $4. That's less than $2 for each pig I save, and each brings me a clear profit of $25 or more."

Many years ago, farmers and power companies put electricity to work on the farm as a labor-saver. Now it increases crop yields, improves stock, brings better farm profits and better farm living—as well as saving work and time in hundreds of ways.

Business-minded farmers and *business*-managed electric companies teamed together to make modern electrified farming methods possible. That's the team for the future, too.

America's *business*-managed, tax-paying

ELECTRIC LIGHT AND POWER COMPANIES★

★*Names on request from this magazine*

● **"MEET CORLISS ARCHER"** *for delightful comedy. CBS — Sundays — 9 P. M., Eastern Time.*

Six steps for more corn

[*From page 47*]

company, they each planted test plots. They used different rates of planting and different fertilizer treatments.

From Nebraska to Pennsylvania, they agreed on these six points. If you want a lot of corn:

1. **Use the very best land on your farm.**
2. **Make sure there's a good moisture supply.**
3. **Select your variety—plant the right one at the right time.**
4. **Plant all the corn your soil's fertility will stand.**
5. **Put on plenty of fertilizer.**
6. **Don't waste fertility on weeds—get rid of them.**

Now most of those ideas aren't brand-new. But if you really do a good job on *all six*, you're one in a thousand—and you're hauling in a lot of corn!

There, in thumbnail, is what these high-yield research farmers learned about the factors which can give you more grain per acre of corn ground. Read about each of the six things with a view to applying as many of them as possible to your own corn-farming program. You might be able to use all six.

Use your best land. Especially on corn-hog farms, no grain can return as much profit as corn. Put this high-profit crop on your best land. The handicap of using anything but your best fields is too great. Use the crop rotation that will, each year, give you the best corn ground.

"My work with this high-yield project surely proved to me again that it takes good land to get bumper corn yields," reports Emory Eigsti, Wayland, Iowa. "I used one 2-acre tract that had been an old hoglot plowed up only the year before—after being down for more years than anybody remembers. Another 2 acres were on ground that had been kept in the harness all through the war years. We put plenty of commercial fertilizer on both, but the old hoglot produced a fourth more corn to the acre. I'm satisfied that we can't afford to raise corn on anything but our best ground," Eigsti concludes.

Here is what happened last year, when all the six steps had been taken. This Nebraska field grew tall and heavy-eared cornstalks

Good moisture supply. Building up moisture-holding humus in the soil, so it can hold off-season rain and snow water and the surplus from spring rains, is something everyone can do. Rolling land can be farmed on the contour, strip-farmed, or even terraced, if necessary, to enable the soil to soak up and hold an extra 3 or 4 inches of moisture. This can boost corn yields another 10 bushels an acre or more during many a growing season.

"By taking advantage of the latest drouth-resistant hybrids and modern methods of land management which store extra moisture in the soil, we can take much of the dry-weather hazard out of corn growing on our land here in the Illinois River bottom of Green County (Illinois)," says R. B. Best.

"I believe a highly fertile soil, with a lot of humus in it, can give us an extra 10 to 15 bushels of corn to the acre in those years when it fails to rain in late July and early August."

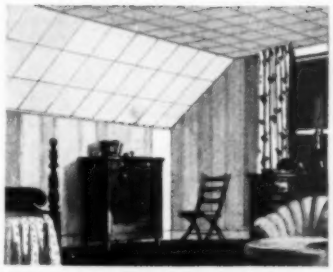
Under certain conditions, the new sprinkler type of irrigation may be practical. If's in the case are whether you have a well, stream, or lake on your farm capable of supplying the water and whether you wish to invest $5,000 to $7,500 in the new lightweight pipes and pumping equipment. You can irrigate up to 40 acres with regular farm manpower. Even in Iowa, Illinois, and Indiana, sprinkler irrigation farmers are finding they can add 20 bushels an acre to yields of corn—on good land—more years than not.

Plant right hybrid at right time. Lester Stibor's experience was typical of all the farmers taking part in the special high-yield study last season. The hybrids varied greatly in their capacity to deliver high yields under a maximum of favorable conditions. And what is more important, the *same* hybrids consistently gave superior yields under the forced conditions to which they were subjected in various locations, some of them more than 1,000 miles apart.

Unfortunately, no one can tell you exactly what hybrids will give highest yields on your particular farm. That's something you'll have to prove for yourself. A small test plot on your own farm will give you some very important facts

[*Turn to page 86*

At harvest, there were ears in the air all the time. This is the big reward for paying close attention to each and every technique



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Beautify your home with Celotex Insulating Sidings. Go on quickly over old exteriors. Add extra insulation that cuts fuel bills. Never need painting. Attractive stone, brick, and shingle patterns in modern colors.

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Enjoy extra comfort winter and summer by insulating your home with Celotex Rock Wool Batts or Celotex Hand-Pouring Insulation. Fast, easy, economical. Pays for itself in fuel savings.

Why some farm people live better than others

More and more of our good farm neighbors are realizing that there's no need to put up with the discomfort of living in an old-fashioned farmhouse. Not when it's so easy to add a world of new convenience and livability by remodeling. So they're taking advantage of favorable conditions to beautify their homes inside and out—add extra rooms—and insulate for greater comfort both winter and summer.

And they're doing it *inexpensively*—by using famous Celotex Building Products that perform several basic functions *at one low cost!* We'd be pleased to show *you* how remodeling or building the thrifty Celotex way can mean better living for your entire family. Drop in and talk over your building needs with us when you're in town. No obligation, of course!

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ALSO AVAILABLE—COMPLETE WORKING PLANS for modern, more efficient new farm buildings. Send $1.00 for each set of 17" x 22" plans you check below.

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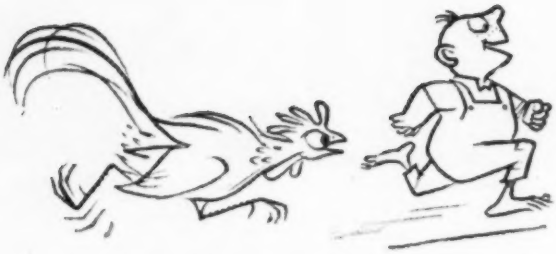
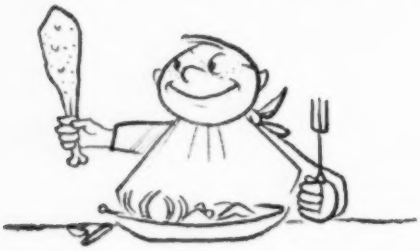


RUNS BETTER



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QUAKER STATE OIL REFINING CORPORATION, OIL CITY, PA.

Six steps for more corn

[*From page 85*]

about what hybrids you should be using for highest yields.

Planting at the right time is almost as important as having the right hybrids. Good farmers in every community have a pretty sound idea of what week in the spring it is best to plant corn. Take that date and then consider planting just a little earlier. It takes time for even the right hybrids to produce bumper yields. Give your corn all the time it needs to ripen fully.

High plant population. With hybrids in use today, there is no question but that the only way to maximum yields is to have high plant population in your cornfield. If you are successful in finding perfectly adapted hybrids for your farm, chances are that on good soil you can increase your rate of planting.

Why don't you experiment with that on at least a limited scale this year? Don't shy away from plant populations of 15,000 or more. They may be just what is needed to give you an extra 10 or 15 bushels an acre.

Add commercial fertilizer. The problem of getting fertility back into the soil to offset the depletion caused by high crop yields is a staggering job. Now, and even more in the future, you are going to need large amounts of commercial fertilizer, especially necessary to provide extra amounts of nitrogen.

But guard against thinking of commercial fertilizer as a substitute for the fertility which can be built up through good crop rotations and plowing down animal wastes and green manure crops. Fact is, the commercial fertilizers can only give you maximum returns when they are applied on carefully managed soil in which has been developed a high humus content.

Kill the weeds. Weeds are out if you want high yields in corn. Weeds soak up precious moisture and drain off badly needed plant food. Power farming equipment and the new chemical weed killers have put weed-free cornfields in the reach of just about every farmer. Don't try to raise weeds and corn, too, and expect big yields of corn.

And you'll probably want to get the sprayer after corn's other big enemy, the corn borer. For the latest ideas on how to kick this fellow off your farm, see "How to Beat the Borer" on page 50.

Figure out, right now, what you can do yet this year to push yields up in your cornfields. Maybe it's not too late to switch fields. Be sure to get several different hybrids, and compare their ability to deliver high yields under forced conditions. You can experiment with two or three higher rates of seeding and see what these hybrids can do under conditions of 12,000 to 16,000 plants to the acre. You can experiment with different rates of commercial fertilizer applications on these high plant population tests.

And remember this: When you lay out your 1951 cropping program, you can go the rest of the way and look into the value of contouring, stripping, terracing, and even sprinkler irrigation. The farmer who makes the most money from corn in the 1950's is going to be the man who produces higher yields. **END**

...THE Firestone

★ OPEN CENTER OR
★ TRACTION CENTER

WILL your next tractor tires have the *New* and *Advanced Firestone Open Center tread* — or the famous *Firestone Traction Center tread?* You make the decision because you know which type of tread will work best in your soil. Whichever tread you prefer, Firestone—and only Firestone—can give you your choice.

The *New* and *Advanced Curved Bar Open Center Firestone* tire is the only Open Center tire with power-arc traction bars. They're curved and tapered to give maximum pulling power. Flared bar openings, with no mud pockets at the shoulder, insure quick and positive cleaning. Twin Punch Protectors lengthen body life. These are just a few of the reasons why the *Curved Bar Open Center Firestone* is the leading tractor tire in its field today.

If you need a *traction center* tire, you can always depend on the *patented Traction Center Firestone Champion* to give you top performance. It has been time-tested and time-proved by thousands of farmers the nation over. Many of them will have no other tire.

Again we say, get the tire that will do the best job on your farm — either the *New* and *Advanced Curved Bar Open Center Firestone* or the *famous Traction Center Firestone.* And remember, you don't have to shop around. Your Firestone Dealer or Store has both tires.

Listen to the Voice of Firestone every Monday evening over NBC

ALWAYS BUY TIRES BUILT BY FIRESTONE, ORIGINATOR OF THE FIRST PRACTICAL PNEUMATIC TRACTOR TIRE

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GET THE DROP ON WEEDS!

New crops bring a new crop of weed problems! But there's a sure way to keep ahead of the weeds and get your grain off to a good start. The earlier spraying is done, the smaller the weeds will be and the easier to control. Just as soon as grain reaches the tillering stage, go after the weeds with the *right* Dow Weed Killer. Formula 40—the famous 2-4 Dow Weed Killer containing the alkanolamine salt of 2,4-D for low volume spraying in crops—is the best amine salt weed killer you can buy. Quality ingredients and expert manufacturing eliminate offensive odor. Or Esteron 44—Dow's superior isopropyl ester formulation—is "tops" for many hard-to-kill weeds.

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Thousands of acres of wheat and other small grains have been successfully sprayed with Formula 40 and Esteron 44.

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No hard water problem! Both Formula 40 and Esteron 44 can be used in hard or soft water with equal effectiveness. They dissolve quickly and completely—there's no sediment to clog spray nozzles.

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Results have *proved* that fields sprayed with Formula 40 or Esteron 44 give better yields and are easier to combine.

spray your grain with

2-4 DOW WEED KILLER

FORMULA 40

or

ESTERON 44

When you buy weed killers buy DOW DIAMOND quality

8 Weed Killers for nearly every farm purpose

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Dow Weed Killers

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CHEMICALS

INDISPENSABLE TO INDUSTRY AND AGRICULTURE

News

Clipping makes wheat better nurse crop

Clipping winter wheat used as a nurse crop may increase the forage yield of alfalfa by as much as one-fourth, according to an Ohio Experiment Station agronomist. L. E. Thatcher reports that alfalfa, seeded in winter wheat which was clipped, yielded 15 percent more forage in one trial and 24 percent more in another trial.

Clipping the wheat in the spring apparently held back the grain crop long enough to allow the newly seeded alfalfa to get better established. However, clipping did result in a slightly reduced grain yield.

In 1944, clipped wheat yielded 2 percent less grain; in 1945, 4 percent less; and in 1946, 3 percent less grain than was obtained from wheat that had not been clipped. But better stands of alfalfa and more legume forage per acre more than offset such small losses.

Clipping helps reduce lodging, and in years when lodging is a problem, that is an important point, Thatcher declares.

The Ohio research workers believe the lodging problem may also be solved by drilling wheat in rows 14 inches apart instead of the customary 7. There was noticeably less lodging in the wider-spaced rows. Also, alfalfa hay yields were greater with the 14-inch wheat seedings.

In 14 times out of 21, alfalfa yielded best when seeded in wheat drilled in rows 14 inches apart.—*Don L. Helt.*

What does field chopping cost?

Whether field choppers or stationary silage choppers were used, the total cost per ton was about the same among New York dairymen who made hay crop silage last year.

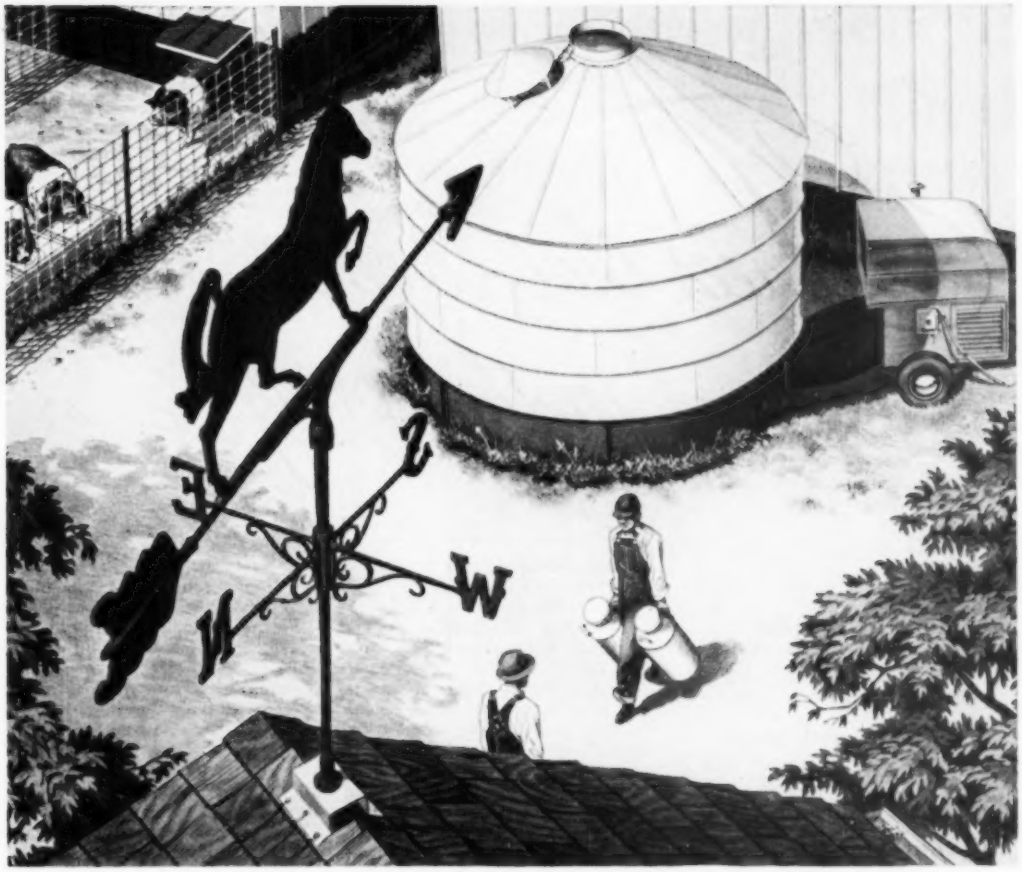
A study of 34 farms has been completed by R. G. Murphy of the Agricultural Economics Department at Cornell. Of these, 14 used field choppers, and 20, stationary choppers.

The field chopper took less labor, but machinery cost was higher. Cost per ton for the field chopper was $1.84, including 66 cents a ton labor cost and 65 cents a ton machinery cost. Cost of using the stationary chopper per ton was $1.81, including 85 cents labor cost and 47 cents machinery cost.

One reason for the high machinery cost for the field choppers in this study was that they are relatively new machines compared with stationary choppers. Depreciation, interest, and insurance are high during early years of use.

Of an average of 65 acres of hay harvested on the farms studied, 22 were made as hay silage. Yields of hay silage varied from 3 to 14 tons an acre, averaging 7.

On a dry-matter basis, 1 ton of field-cured hay is considered equal to 3 tons of hay crop silage. This study showed that it requires more labor and costs more to make hay as silage than to harvest it as cured hay.—*James S. Knapp.*



All-weather worker

Don't be a weather-vane watcher!

When Armco Stainless Steel is "helping" with the chores, you don't have to fret about the elements damaging equipment made of this durable metal. It is easy to keep clean; it resists rust and corrosion. Because it is solid, rustless metal all the way through with no plating to wear off, Armco Stainless gives many times the service of ordinary steels.

Used in dairy equipment, glass-smooth Armco Stainless is easy to keep clean and sanitary. In space heaters and crop driers, it defies heat damage and corrosion. It is ideal for use in hand sprayers and especially serviceable in vital parts of stock waterers.

Stainless helps the farmer's wife too. Sinks and work surfaces, dishwasher racks, refrigerator shelves, washing machine tubs, key parts of modern kitchen ranges—these are just a few of the places where Armco Stainless lightens housework, looks better and lasts longer. Stainless is one of many Armco Special-Purpose Steels, each developed for particular types of service.

When buying for better farm living and more economical farm operation, ask where the manufacturer has used Armco extra-quality steels in products and equipment. For additional information, just check and mail the handy coupon below.

MAIL THIS HANDY COUPON NOW

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ARMCO

Trees that bloom in the spring...

. . . to twist that line from Gilbert and Sullivan, have much to do with your case. They frame your yard in loveliness, give shade throughout the summer, and yield a harvest of fruit and color until late fall

By F. B. Woodroffe

Plant a tree—and you'll be pleased with yourself for years to come. Plant a tree that loads itself with bloom—or two trees or a dozen different sorts—and you make a good thing that much better.

Many of our small flowering trees give two shows a season—puffy clouds of pink, red, or shimmering white flowers in spring, then a big load of fruit or berries in the fall.

Most of the more popular ones throw only light shade later, so lawns and flowers grow well under them.

Use your imagination when you choose your trees. The sky will be blue with little white clouds scudding over when the shadbush opens its baby-ribbon flowers and looks, for all the world, like one of those clouds had caught in its branches. Shadbush is the "serviceberry" of pioneer days. The mild, sweet fruit is still a treat—if you get to it ahead of the birds.

Shadbush makes pretty thickets and, like the white-bodied birch trees, fits delightfully into a border where you've a cluster of slender junipers.

Redbud trees knot their slate-gray branches with bright magenta almost before the green gets back into the willows and while maple buds are still a red haze against the sky.

To appreciate the redbud's highly individual color, always plant it near white. Or set it where a Hopa Crabapple can lean its mounds of frothy rose-pink casually into it.

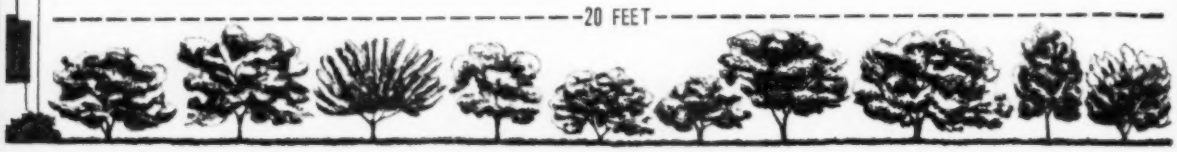
Keep redbuds, deep rose-red crabapples, and the spectacular Saucer Magnolias and Red Flowering Dogwoods away from the orange-red glow of the flowering quinces. Never set them close to the early forsythia's somewhat acid yellow.

As underplantings, specialize on blues—Blue Phlox, Virginia Bluebells, forget-me-nots, smoky-blue camassia spires, violets, and great basketfuls of Swiss Blue Pansies.

Crabapples and hawthorns are prodigal with flowers. They'll open on days when the May sun lies warm on your shoulders, days when you never heard of trouble. The windmill will have stopped its whirling but the trees will be breezy with the sound of bees. Both crabapples and hawthorns are loaded again in the fall with fruit, and both can be easily shaped to fit your particular space.

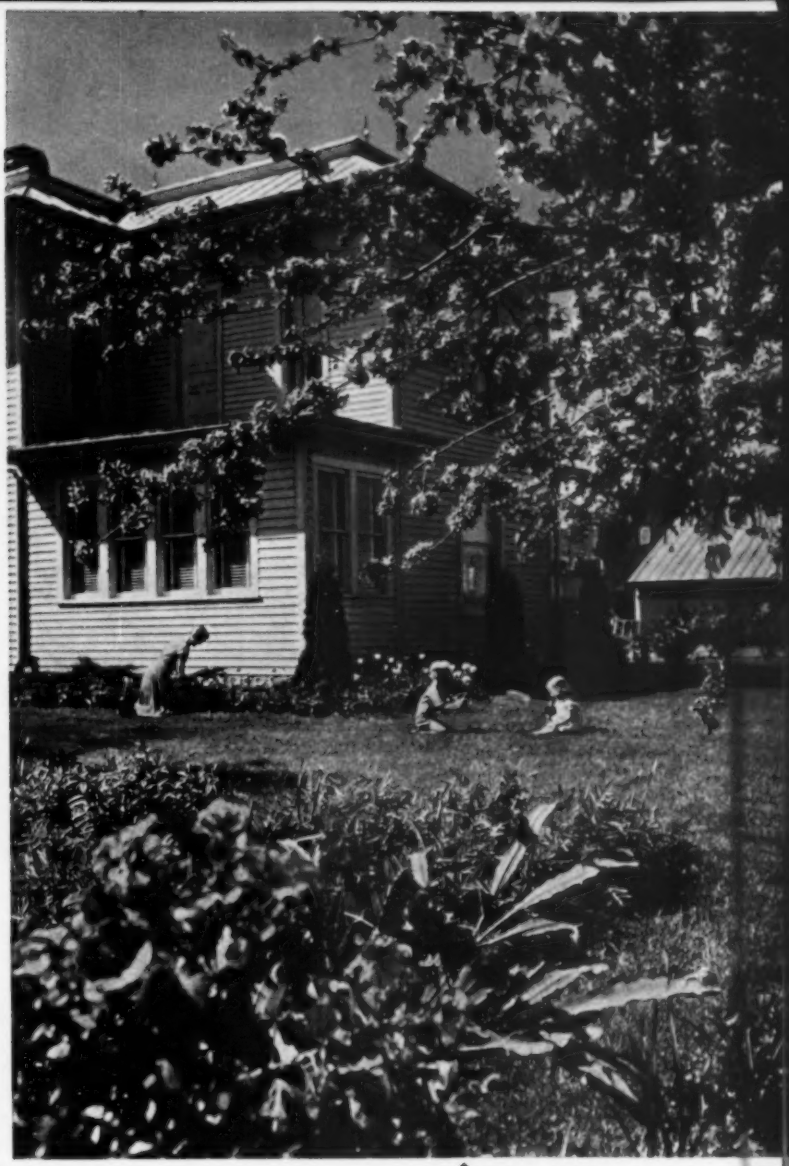
The Thornless [*Turn to page 93*

THE DRAWING BELOW SHOWS THE BASIC OUTLINE OF THE BETTER-KNOWN FLOWERING TREES FULL GROWN



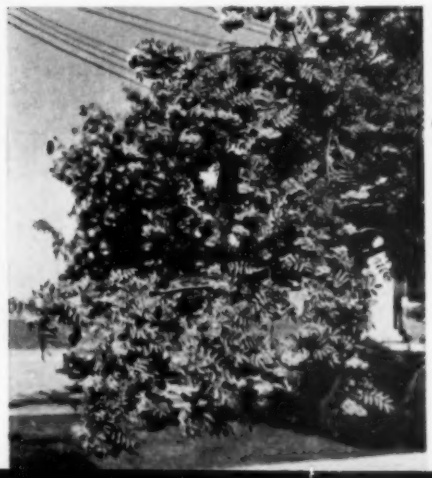
Hawthorn Dogwood Crabapple Redbud Magnolia Blackhaw Mtn. Ash Mulberry Silverbell Cherry

Goldenchain (see table on page 94) carries clusters of golden bloom 18 or so inches long. The bark is green, foliage like big clover leaves. This tree-shrub blooms in late spring but is not hardy north of Missouri ↓



↑ **This apple tree,** photographed for Successful Farming in Ohio, demonstrates what a fine job flowering trees do in framing yard views and softening the lines of homes and outbuildings. Nor can we discount the apples later on!

← **Saucer Magnolia** grows to a small tree with handsome, shining foliage and pinkish-white flowers, slightly fragrant and of great size. It begins bloom in early spring



← **Mountain Ash,** shown here with fall berries, flowers in white clusters above dark foliage. Bloom comes in May and June, but the berries, ripe in September when leaves have yellowed, hang on far into winter and provide food for birds

Whether you haul cotton or carrots . . .

NEW INTERNATIONAL TRUCKS

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You can cut the costs of hauling crops, you can cut the costs of all 'round truck operations on any farm, with a new heavy-duty engineered International.

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NBC, Sunday afternoons

See the ALL NEW, ALL PROVED

INTERNATIONAL TRUCKS

INTERNATIONAL HARVESTER COMPANY CHICAGO

Flowering trees

[*From page 90*]

Honey Locust makes a fine farm lawn tree, as does the always-showy Mountain Ash. Red Horse-chestnut deserves a special setting for its nicely styled display of rosy-red plumes.

Chinese Dogwood and Japanese Tree Lilac have little competition when they bloom, but keep you supplied with tree-sized bouquets through early summer. When August comes, the Pagoda-tree's cream-white flowers make a handsome background beyond masses of red, pink, and purple garden phlox and the first giddy burst of annuals.

A witchhazel in full bloom looks like an explosion of golden light, so tiny and so crowded are the little threadlike flowers along each layered branch. Weeks after frost has "cooked" all but the chrysanthemums, the witchhazel keeps up its display.

Plant with imagination when you locate flowering trees with rich-colored foliage. Purpleleaf Plum makes a splendid accent but should not be dotted all over the place.

There are two forms of the Corky-bark or Winged Euonymus. Buy the taller one if you need a background, and especially if you have lilacs. The lilac leaves are green until they drop and make the most effective of all contrasts for the lovely clear rose of the euonymus foliage in September. This pairing, with soft yellow chrysanthemums blooming below, is guaranteed to slow traffic.

When you come to planting your flowering trees, remember they'll be a long time with you. Choose sunny spots where they'll have good, natural drainage. Allow for spread. Be sure that spread won't cut out important, kitchen-window views of danger spots in the service yard where you'll want to keep the hammer mill and bull chute in view when the menfolk are working around there. Dig holes large enough to straighten out the roots of your trees. Cover them with nothing less than rich topsoil. See that the stems stand straight when you've finished.

It's important to settle each new tree in place with a flood of water. To get full benefit, jostle the tree a bit, rocking it so that the water finds every air hole and sucks the fine soil in about the roots.

More important yet, don't try to plant nonhardy trees too far north. As an example, the Goldenchain mentioned on page 91 and in the table on the following page won't do well north of central Iowa, Illinois, Indiana, and Ohio. The Flowering Dogwoods are usually not found much north of the Missouri line. The Star Magnolia will do in sheltered positions up as far as mid-Iowa, but the Saucer Magnolia will grow almost to the Minnesota line—and eastward. The redbud will tolerate mid-Iowa and Illinois.

The Oriental Cherry mentioned in the table on the next page won't thrive north of the north Missouri line and along a curve sweeping northeastward from there. The Red Horse-chestnut doesn't like it much farther north than mid-Iowa. The Silverbell stops at about the north Iowa line. But the rest of the list of trees on page 94 are hardy much farther north, especially if you shelter them a little.

So start planting soon; and don't, please, overlook the table that follows.

[*Turn to page 94*

HERE ARE *Two* NEW BARRETT NITROGEN FERTILIZER MATERIALS

BARRETT—*America's Leading Distributor of Fertilizer Nitrogen*—now brings you two, new, high-analysis, Urea Nitrogen fertilizer materials.

BARRETT STANDARD UREA FERTILIZER COMPOUND

- Guaranteed to contain 42% Nitrogen, with all the Nitrogen in the Urea form and completely soluble in water.
- A granular, free-flowing material, conditioned with dolomitic limestone.
- Packed in "easy-to-handle," 80-pound, multiwall, paper bags.
- Recommended for plowing under and for top-dressing and side-dressing. Ideally suited for plowing under for corn and tobacco and for fertilizing fruit trees and other important crops.

BARRETT STANDARD UREA SPRAY FERTILIZER

- Guaranteed to contain 46% Nitrogen—all in the form of Urea.
- A crystalline compound, completely soluble in water.
- Packed in "easy-to-handle," 50-pound, multiwall, paper bags.
- Prepared specifically for foliar fertilizer spray. Especially adapted for use in conjunction with a regular apple spray program. May also be used to "spray-fertilize" other crops with nitrogen—such as grass, small grain, tobacco, etc.

You save money when you use Barrett Standard UREA fertilizer materials. The high analyses of these materials effect big economies in freight and trucking costs. Barrett Standard UREA Fertilizer Compound and Barrett Standard UREA Spray Fertilizer are manufactured at South Point, Ohio, in one of the newest and most modern Urea plants in the world. To obtain these materials for use on your farm, contact your local fertilizer supplier.

Barrett

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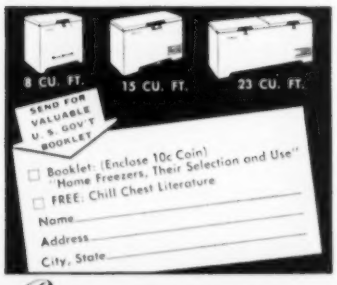
BARRETT PRODUCTS HAVE SERVED AMERICA SINCE 1854

CHILL CHEST

FOOD FREEZERS

"The THRIFTY buy in '50!"

Chill Chests are smaller outside with LARGER CAPACITY INSIDE for fast freezing and storage of frozen foods at home. The 8, 15 and 23 cubic foot models compare in both size and price with average 6, 12, and 20 cubic foot freezers of other makes. Little Wonder CHILL CHEST's superior features and price make them "the THRIFTY buy in '50!". Be sure to visit your Chill Chest Dealer . . . see the new, more convenient size Baskets, frost-free Seal Zone, and non-rusting, chip-proof Aluminum Freezing Walls. All models carry 5-Year Warranty.



Revco, INC. • DEERFIELD, MICH.

Flowering trees [*From page 93*]

Quick guide—twenty-five of the best flowering trees and what they can do for you

	Color	Blooms	Height in feet	Shape
Frame a door or gate				
Hopa Crabapple	deep rose	May	10	Erect
Purpleleaf Plum	rose	May	10	Upright
Flowering Dogwoods	white, rose	May	15	Spreading, layered
Add height to flower borders				
Star Magnolia	white	April-May	12	Open, spreading
Nanking Cherry	white	April-May	8	Bushy
Sargent Crabapple	white	May	8	Spreading, irregular
Bechtel Crabapple	pale pink	May	15	Resembles an apple
Goldenchain	yellow	May	12	Slender, erect
Solo—as specimens on lawn				
Oriental Cherry (P. serrulata)	pink	April-May	25	Upright
Saucer Magnolia	light pink	May	20	Upright
Red Flowering Dogwood	rose-pink	May	15	Spreading
Washington Thorn	white	May	20	Wide-spreading
Goldenchain	yellow	May	12	Slender, erect
Thornless Honey Locust	white	May-June	40	Upright
Red Horse-chestnut	red	May-June	20	Upright
Japanese Tree Lilac	cream	June	20	Upright
Upright Mountain Ash	orange	June	20	Erect
Provide colorful background				
Redbud	magenta-pink	April-May	25	Picturesque, erect
Shadbush	white	April-May	20	Tall, slender
Almey Crabapple	bright pink	May	12	Erect
Paul's Scarlet Thorn	rose-red	May-June	20	Erect, dense
Winged Euonymus	pink	May	12	Dense, layered
Contrast with evergreens				
Shadbush	white	April-May	20	Tall, slender
Flowering Dogwoods	white, rose	May	15	Spreading, layered
Silverbell-tree	white	May	15	Open, dainty
White Fringe-tree	white	May-June	20	Upright oval
Chinese Dogwood	white	June	20	Compact
Japanese Tree Lilac	cream	June	20	Upright
Pagoda-tree	white	August	35	Open, layered
Witchhazel	light yellow	October	15	Airy, bushlike
Give a second show of brilliant foliage or fruit				**Fall effect**
Winged Euonymus	pink	May	12	Unique clear-rose foliage in Sept.
Flowering Dogwoods	white, rose	May	15	Red foliage and fruits through fall
Almey Crabapple	bright pink	May	12	Red dollar-size crabs in Sept.
Japanese Flowering Crabapple	pink	May	20	Orange fruits in fall
Purpleleaf Plum	pink	May	10	Purple foliage and fruit in Sept.
Mountain Ash	white	May	20	Brilliant orange fruit in Aug.-Sept.
Washington Thorn	white	May	20	Red fruits persisting into Dec.

This rugged dependable Chevrolet for '50 really earns its keep!

Whether you choose the new 105-h.p. Valve-in-Head engine with Powerglide automatic transmission,* or the rugged standard Valve-in-Head engine with Synchro-Mesh transmission, you can trust your Chevrolet to be ready for any driving assignment . . . in any kind of weather.

Here's the car that has everything you want—that's right for you seven days each week!

Around the farm, you'll find that Chevrolet has outstanding power and stamina. Work this rugged beauty round the clock every day—your Chevrolet can take it!

And for all road pleasure, there's no car in the low-price field that matches Chevrolet's riding and driving ease. It's designed from the wide tread tires on up to carry you and your family more miles . . . in more comfort . . . for more years.

Chevrolet for '50 is as handsome as it is powerful and sturdy, too. Every one of the fourteen new Styleline and Fleetline body-types has a distinctively practical styling that is beautiful for keeps. They'll take the most rugged going—and still stay so good looking that you'll be proud of your Chevrolet for years!

Add up these exclusive Chevrolet advantages—compare Chevrolet's price. You can't help . . . but agree that Chevrolet offers more value—that Chevrolet again is first and finest at lowest cost! See your Chevrolet dealer today.

CHEVROLET MOTOR DIVISION, *General Motors Corporation*, DETROIT 2, MICHIGAN

CHEVROLET

FIRST . . . and Finest . . . at Lowest Cost!

Longest, heaviest car in its field. Chevrolet for '50 is really solidly built—even the muffled click as its doors swing shut tells you of Chevrolet's big car construction. And it's a great feeling to know that you have those proved Certi-Safe hydraulic brakes with rivetless linings.

Space where you need it when you need it—that's the roomy new Chevrolet for '50! Your passengers can really relax and stretch on those generous "five-foot" seats—spacious comfort that leaves you fresh at the end of a long trip. You'll like that giant-size trunk, too.

Unisteel Body by Fisher, Center-Point Steering with Unitized Knee-Action ride, airplane-type shock absorbers, Panoramic Visibility—these are just a few of the big car features that combine to make Chevrolet for '50 a better-riding, better-handling, safer car than ever!

Good looks that last! New Style-Star Bodies by Fisher in sparkling color harmonies and new two-tone interiors make Chevrolet a durable beauty inside and out. And just wait till you experience the effortless, no-clutch handling of the sensational new Powerglide automatic transmission!*

*Combination of Powerglide automatic transmission and 105-h.p. engine optional on De Luxe models at extra cost

AMERICA'S BEST SELLER . . . AMERICA'S BEST BUY

When you judge fence
by what you get out of it you'll

Choose RED BRAND

It's Galvannealed for Longer Life

Galvannealing is the exclusive Keystone process that fuses zinc to the strong steel wires of Red Brand Fence, forming a superior, longer lasting coating. It means greater rust resistance and longer wear.

What's more, the steel in Red Brand Fence contains copper to give it even greater wearing quality and rust resistance. That's why Red Brand Fence outlasts ordinary wire fence.

Years of farm use as well as rigid laboratory testing have proved this superiority of Red Brand Fence. Insist on it if you want *real* value when you need fence.

HOW TO GET THE MOST POSSIBLE PROFIT FROM YOUR FARM

If you're interested in boosting your crop yield and your farm income, let "Red" Brand tell you about the fast-acting Red Brand Practical Land Use Program. On his radio program, "Red" Brand tells you how farmers like yourself are making Practical Land Use pay big dividends. Check your local papers for the time and station—and ask your Red Brand dealer to tell you more about the Practical Land Use Program.

Tune in "Red" Brand's Success Stories about Practical Land Use Farmers.

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RED BRAND FENCE • RED TOP STEEL POSTS • NON-CLIMBABLE FENCE • NAILS • BALE TIES • GATES • KEYSTONE POULTRY NETTING

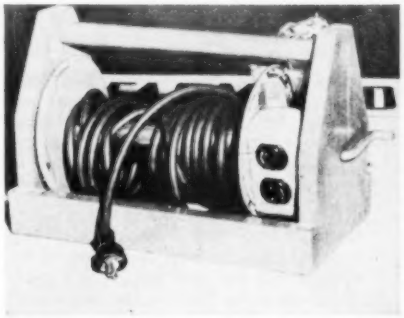
Successful

SHORT CUTS

Build them yourself, save time and dollars

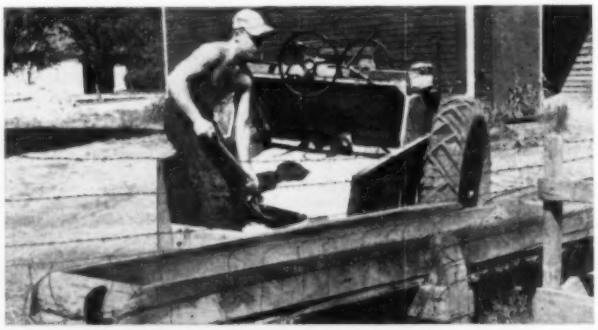
Pulling posts is now an easy job for A. R. Clause, Grand Junction, Iowa. He and his sons fasten a chain to the base of the post and hitch it to their hydraulic lift loader. The system enables them to pull 30 rods an hour

Milkhouse table hinges to wall and can be lowered into place over washing tubs. Crawford Lewis, Carroll County, Missouri, built it to use as a cleaning platform and as a firm writing space for record-keeping

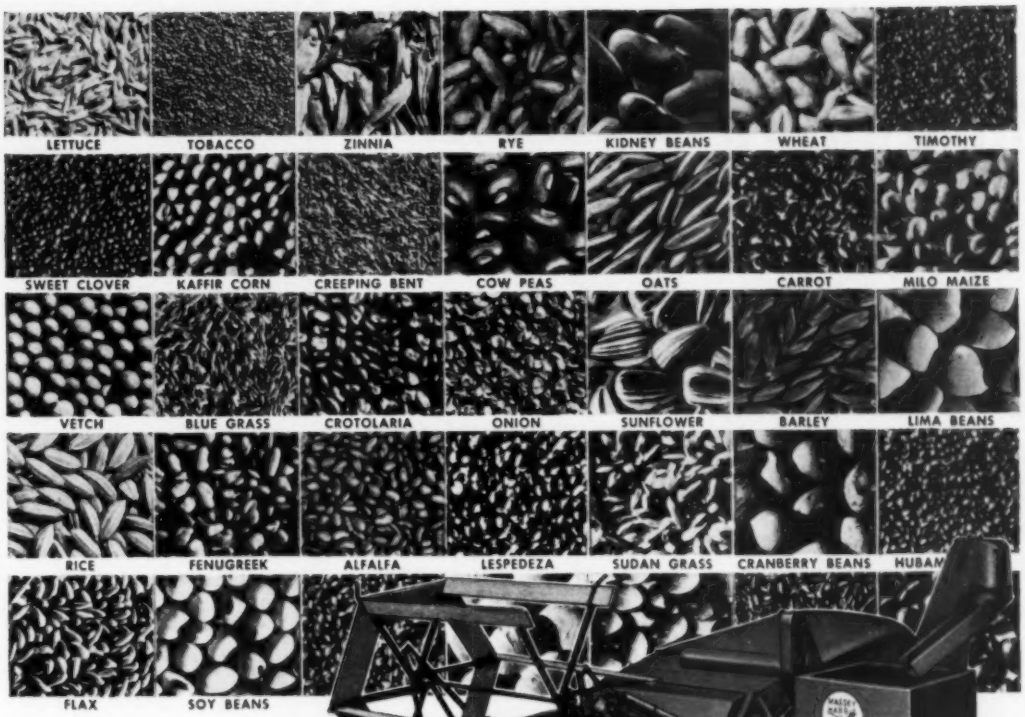


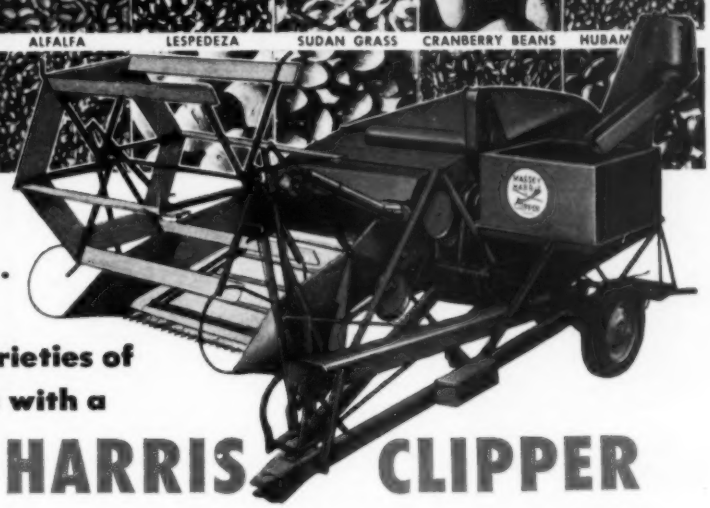
Long extension cord is easily handled when rigged this way. W. A. Betz, Polk County, Iowa, built it for use around his farmstead. The heavy-duty cord winds on a reel, and a double outlet is fastened at the end. A crank makes the rewinding job an easy, quick task

Barnyard drain has ended mud trouble for C. Johnson, Iroquois County, Illinois. Welded grill covers catch basin, which drains by a tile line into a field



Remote control on tractor allows Preston Woods, De Kalb County, Illinois, to stay in mounted feedbox and still drive from bunk to bunk. Extensions of the driving controls go back to box, which was welded of sheet steel, has 300-bushel capacity





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MASSEY-HARRIS CLIPPER

Seeds as small as red-top clover or creeping bent . . . as touchy as Brome . . . as brittle as beans . . . or as big as limas — you can handle them all with a Massey-Harris Clipper, the original straight-through combine.

The secret is in the Massey-Harris design, the result of almost half a century of combine "know-how". Your crop goes straight through, in a thin, even blanket, just as you cut it.

There's no bunching. No slugging. No riding of seeds on a mattress of straw to make separating difficult.

The Massey-Harris rasp-bar cylinder rubs out the grain and seed crops in a natural easy way. At the same time, this cylinder is easily adjusted, its speed regulated — the whole combine controlled to do a fast, clean, economical job, in every combinable crop.

The result is more of your crop in the grain tank . . . a cleaner crop . . . more complete separation . . . longer life — and more profits.

Talk with men who own Clipper Combines — who have had experience with them. Watch one at work in the fields. You'll understand why the Clipper is the preferred small combine wherever grain is grown.

There's a Massey-Harris dealer near you. Ask him to show you a Clipper and tell you why it will pay you to own one. Massey-Harris Clippers are built in six and seven foot sizes, grain tank or bagger models. For a complete folder by mail, use the coupon below.

Make it a Massey-Harris

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Quality Avenue, Racine, Wis.
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Please send me complete information on the Massey-Harris Clipper Combines.

NAME.....
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TOWN.....R.F.D.....
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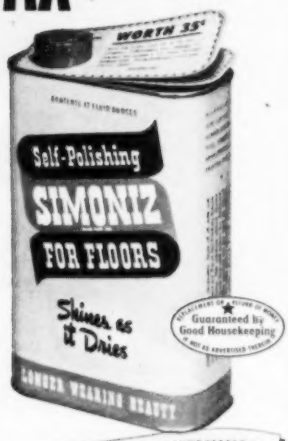
THE WORLD'S FINEST Self-Polishing WAX for your floors!



Self-polishing Simoniz OUTSHINES ... OUTLASTS THEM ALL!

Save time! Save work! Save cash—with longer lasting, water repellent, Self-Polishing Simoniz! And your floors will sparkle as never before . . withstand repeated moppings . . grow even brighter and more lovely with everyday wear! Try this liquid miracle wax—today!

Sold by grocery, hardware, variety, drug, accessory and department stores—and linoleum dealers everywhere.

THE SIMONIZ COMPANY, CHICAGO 16, ILL.

MARVELOUS FOR LINOLEUM, RUBBER OR ASPHALT TILE, TERRAZZO, FINISHED OR PAINTED WOOD FLOORS

General farms are obsolete!

[*From page 33*]

200 head of sheep to utilize the poor hill pasture. We bought Shorthorn cows, which we crossed with Angus bulls, to breed blue-roan calves which we put on what good pasture we had.

We know now what every good farmer knows, or must find out—that poor land and poor fields never make any money for anybody, no matter what the program.

The sheep did fairly well. The Shorthorn cows gave enough milk to bring up good, hardy crossbred calves, which utilized the moderately good pasture probably better than purebred calves would have done. But they didn't make us any money, principally because the forage was so poor that it required too many acres to carry them.

We know now that if we had borrowed the money, limed and fertilized the whole place, put it down into legumes, and then begun our livestock program, we should have lost a great deal less money.

We had also to learn that corn was *not* a more profitable crop than heavy legumes and grasses but, generally speaking, a *less* profitable one, in our area.

In his newly published book, *Out of the Earth*, Mr. Bromfield has expanded the challenging theme of this article, and explains many of the soil and livestock management techniques in use at Malabar Farm, Lucas, Ohio.—*Editor*

Gradually, we began to produce less corn, more good grass. As we did so, the rising profits began to show up on the farm books—principally in the money we did not have to spend, the man-hours we did not need, and the machinery we did not have to buy.

For three years now, we have not raised any wheat. Our rotation has been from heavy meadows of bromegrass, alfalfa, and Ladino clover, into spring barley or oats and back again into alfalfa, bromegrass, and Ladino.

Now we plan to go one step further. In the meadow seeding, we have tremendously heavy first cuttings, most of which we put in the silos. There is a surplus, however, which in the past we have been making into hay. This is an extremely difficult job, owing to the heaviness and lushness of the first cutting. It is difficult or almost impossible to cut properly and is often subject to wetting during late May and early June. In the future, we are using this excess first cutting for bedding.

There are many advantages to this, both economic and otherwise. It does not matter whether the hay is wetted or not. If it is in good condition, the cattle will eat large amounts of it as roughage while it is being used as bedding.

After much calculation, we find that even though we could get a good price if we sold this excess first-cutting hay, we shall actually make money by cutting out the fitting operations, gasoline, and higher fertilizer costs of raising a nurse crop for a new seeding. In other words, our only operation will be the trash mulching of old seedings in which the legumes have been crowded out, in a single once-over operation.

GREENBLADE
Asgrow lawn seed mixture without ryegrass

FOR LAWNS THAT LOOK WELL, GROW WELL, WEAR WELL

Greenblade gives you a better lawn because of its higher proportion of the desirable permanent grasses that combine to make thick, smooth, wear-resisting turf.

LOOK FOR THE GREEN AND SILVER CARTON

If you can't get it from your local dealer write our nearest branch

ASSOCIATED SEED GROWERS, Inc.

ATLANTA 2 • CAMBRIDGE, N.Y. • INDIANAPOLIS 25
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Cut Pork-Raising Costs

1 WITH A Jamesway PORK-MAKER HOG FEEDER

The Jamesway Pork-Maker has proved itself as a labor and feed saver. It's weatherproof, hog-proof. Built for years of dependable service. Adjustable to any feed . . . keeps it dry and clean, cuts waste. Available in 6, 10 and 16 hole sizes.

2 WITH A Jamesway PROFIT-MAKER HOG WATERER

The Jamesway Profit-Maker waterer supplies fresh, clean water for your hogs at all times. Big tank holds 70 gallons. Made of heavy-duty galvanized steel. Removable mud pans. Hinged covers. Heat chamber. Adjustable float. See it at your Jamesway dealer.

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A home planning service tailored to farm living is being offered by one store near you. See page 75.

CRIB PLANS FREE!

Send for FREE crib blueprints with list materials. Also Elevator catalog—shows 8 styles.

MEYER FARM ELEVATORS CUP AND PORTABLE

Simplest, strongest—no short turns. Widest, sturdiest PORTABLE—handles baled hay. Write us your crib problems today. State whether interested in BUCKET or PORTABLE. Postal brings FREE catalog.

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"NO LONGER SLEEPLESS!"

Changing to Famous Cereal Drink Brings Natural Relief

Can't sleep? . . . Toss and turn?... Get up in the morning feeling more tired than when you went to bed? . . . Then you'll find real encouragement in this letter from a man in Peoria, Illinois:

"Nervousness and sleepless nights were my two reasons for switching to POSTUM—and you can tell the world that drinking POSTUM instead of coffee quieted my nerves and made me sleep better, thus improving my general health."

SCIENTIFIC FACTS: Both coffee and tea contain *caffein*—a drug—a nerves stimulant! So while many people can drink coffee or tea without ill-effect, others suffer nervousness, indigestion, sleepless nights. But POSTUM contains no caffein or other drug—nothing that can possibly cause nervousness, indigestion, sleeplessness!

MAKE THIS TEST: Buy INSTANT POSTUM today—drink POSTUM exclusively for 30 days. See if POSTUM doesn't help you, too, to sleep better, feel better, enjoy life more!... INSTANT POSTUM—A Vigorous Drink made from Healthful Wheat and Bran. A Product of General Foods.

BUILD A SANITARY MILK HOUSE

A SANITARY milk house that doesn't open directly to your milking stable will make your work easier, help you meet Grade A regulations. You can build one quickly and easily with fireproof Gold Bond Gypsum Wallboard. Sturdy, moisture-resistant panels nail to framing members, or right over old material. Adds insulation, too, that keeps your milk house cooler in summer. Seal wallboard joints with the Gold Bond Tape Joint System. For more information, write Div. W., Dept. SF-4.

Available at your local Gold Bond Lumber and Building Materials Dealer!

NATIONAL GYPSUM COMPANY
BUFFALO 2, N. Y.

This means that the operation will be done sometime during the late summer, and that the next spring we will be harvesting hay off the same field without the intervening year given over to a nurse crop.

Gradually, we have moved into a streamlined farm program. As we have done so, labor and fertilizer costs, and man-hours, have declined rapidly. So have feed costs and capital investment in machinery and buildings.

Our carrying capacity, winter and summer, of cattle has increased from the original 30 head which could barely get through with the feed raised in the first year or two to a capacity of from 275 to 300 head.

Most important of all, we have been able to prove that an acre of our land sown to alfalfa, bromegrass, and Ladino brings in the same gross in terms of cash as that of the corn farmer who raises 90 to 100 baskets an acre. Less than 5 percent of the farmers growing corn in the United States raise as much as 90 baskets of corn to the acre. Moreover, our net profit is many times per acre that of the corn farmer. Compared with the corn farmer's costs, heavy grass costs us approximately one-seventh as much in labor and one-fifth as much in fertilizer.

We buy no protein supplements or concentrates at $100 to $120 a ton, as we manufacture sufficient protein for dairy cattle and beef feeders out of sunlight, air, and water, through our legumes. Except for bonemeal, fed as a precaution to the cows being milked, we have bought no minerals for the past two years. The cattle apparently are getting all the minerals they need out of the forage from our *deep-rooted* legumes and grasses, and seldom approach the boxes where minerals are fed at free-choice.

We have fed, until this year, no grain to any animal on the farm except the cows in the milking parlor, and then only a maximum of 5 pounds a day to the heaviest producers.

Our grass silage costs us one-seventh in labor and one-fifth in fertilizer what corn silage cost us in the past. The same acreage of grass as of 100-bushel-to-the-acre corn will fill a silo with grass silage. We shall have in the silo at least 25 percent more roughage feed, because the grass packs so much more tightly. The quality of feed is much higher than corn silage. By experience, we know we take from 5 percent upward more milk off the grass silage than off the corn silage.

It is necessary, I think, to explain the low cost of grass silage as against corn silage. We run the heavy mixtures of bromegrass, alfalfa, and Ladino on the same land for a minimum of 6 years, some of it as long as 10. Those fields are plowed only when the bromegrass, going wild on the free nitrogen released by the legumes, finally crowds out the legumes themselves.

During that period of six years and upward, the *only* labor and the *only* fertilizer expenditures are the top-dressing of the field once every three years with 250 pounds of 0-12-12 or 0-20-20 commercial fertilizer, or two top-dressings of barnyard manure. We have some seedings producing heavily after six years in which the only labor has been riding the manure spreader over the field twice.

Beginning in 1949, we started another

[*Turn to page 100*

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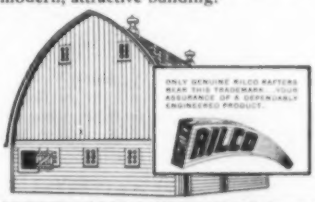
Rilco rafters are ready to put up when you get them. You never touch a drill or a saw. Because we've cut 'em to fit exactly . . . drilled all the bolt holes at exactly the right places. All you do is swing 'em into position, and bolt 'em down. You can have all the framing done ready for roofing and sheathing *in less than one working day!* Be sure you get genuine Rilco Rafters at your lumber dealer.

Send the coupon for all the information on these strong, glued-laminated wood rafters that give you more room in a modern, attractive building.



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Profit in 3 ways - with the

JOHN DEERE FORAGE HARVESTER

You'll slash days from your haying calendar . . . boost your haying profits three ways by saving time, feed, and labor when you "make hay" with a John Deere Forage Harvester.

The John Deere cuts haying time to a fraction of what it used to be . . . picks up the windrow, chops it, and loads the chopped hay on the wagon in one fast operation. You beat the ever-present threat of bad weather . . . you save time for other jobs during the rush haying season.

The John Deere stretches the feed value of your hay to the maximum by making *all* the hay palatable. Livestock eat it completely because stems and stalks are chopped and mixed with the leaves.

And, you cut labor costs to the core. One man—the tractor operator—is all the field crew required, and his job is merely guiding the tractor along the windrow.

But your savings don't stop with chopping hay! Substitute the field-proved row-crop unit for the windrow pickup and you're set to prepare standing row-crops for the silo in one trip through the field . . . to multiply the same savings you make during the haying season.

See your John Deere dealer for the full story about the time-saving, profit-boosting John Deere Forage Harvester. Write today for free literature.

In addition to handling field cured hay, the versatile John Deere chops green hay for silage, combine straw for compact storage and, with the row-crop unit in position, makes silage from standing row-crops in one fast trip.

JOHN DEERE MOLINE, ILL.

General farms are obsolete!

[*From page 99*]

practice which carries our streamlined farming one degree further. We have cut out all dry grain feeding by putting the whole grain into the grass silage as we filled the silo. The program is a simple one. To begin with, we make our grass silage with a baler in this fashion:

A side delivery rake is attached to the mower and the heavy grass and legumes are mowed and windrowed in a single operation. When the mixture is sufficiently wilted, we bring in the one-man pick-up baler, disconnect the tying apparatus, and run it along the windrow about 7 or 8 miles an hour.

The slice baler picks up the grass, chops it into slugs of convenient size, and pushes it onto the wagon attached to the baler. Working on the wagon, a boy can build the load by piling up the slugs of grass like bricks. There are no ropes of hay and there are no *heavy* slugs; they are all the same.

The wagon is then driven to the silage cutter where a wagon of whole grain oats and barley from the previous year's crop is waiting. While the grass is thrown into the silage cutter, the grain is shoveled in with it and the winter grain feeding is done. Not only is it done, but it is better feed than if ground and fed dry.

After streamlining crop production, it became evident we needed a streamlined livestock program—one which would give us the greatest benefits and profits on the basis of grass, legume, and small grain farming.

This did not form itself at once. It came about through general evolution in which many things had to be considered, not the least of which was our limited cattle shelter and feeding barns, and their old-fashioned construction. They were conceived and built in the days when labor and time were cheap. As with the average farmer, the changes had been made slowly and conservatively, much of them with our own labor and materials. But by replanning the big and high, old-fashioned bank barns, we were able to cut labor and man-hours by at least 50 percent.

The biggest barn was converted into a combination loafing shed and milking parlor, with hay and straw storage directly overhead, so that both could be fed directly to the cattle through trap doors or open feeding racks extending to the second floor. This arrangement meant merely cutting the strings on the bales of hay or straw and allowing gravity to carry them downward. The other barns were remodeled in a similar fashion, save that there was no milking parlor.

The cattle program went through many changes from the original combination of beef and dairy cattle, until the beef cattle were eliminated entirely.

At the present time, we bring in carloads of Holstein heifers, bought in Wisconsin, Minnesota, or Canada when the prices are low in the late autumn. These are turned in, at breeding age, with Angus bulls.

We take from the heifers a calf and a year's milk. Then we resell them as second-calf heifers for 2½ times or more what we paid for them, carrying them meanwhile on excellent heavy pasture in summer, and in winter on good grass and legume silage and hay.

The operation is a comparatively simple one, with a high degree of flexibility. When we have a heifer which is wild, a hard milker, or a low producer, we do not bother with her in the dairy. We turn her out on good grass, as a nurse cow to two calves.

At the end of the year, she delivers to us two calves which have cost us, directly, zero in protein supplements and grain, zero in calf feeds, zero in bucket feeding or labor of any kind, and zero in sickness. In some cases, the profits on the two calves are higner than if we had taken the heifer into the milk parlor.

If we have more calves than nurse cows to care for them, the calves are sold as veal, and at the end of the season—about November first—all calves from week-olds to 400- and 500-pounders are sold off, and the stage cleared for the new heifers.

Calves born during the winter are doubled up with nurse heifers and given a creep, where they can learn to eat silage and hay. In the spring, they are turned out with their mothers, on pasture.

When we have an exceptionally fine producer, we do not sell her but keep her for our milking herd, thus building up a top-quality producing herd much more rapidly than we should be able to breed such a herd.

The breeding and resale of heifers at 2½ times what we paid for them, plus a calf and a year's milk or two nurse calves per heifer, represents a rapid turnover of capital. The calves, when sold each November 1, represent a cash crop fully as much as a crop of wheat or corn. And they are considerably more profitable in the short as well as the long run of soil building and steadily increasing fertility. Meanwhile, a fat milk check keeps everything going—a consideration every farmer can heartily appreciate.

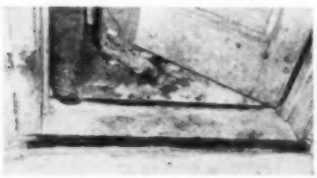
I am aware that the conditions which made possible a streamlined program at Malabar are by no means universal. The pattern, however, will apply in one way or another to most of the vast Cornbelt and the whole of the South.

Such efficiency, with better regard for the soil and for grazing lands, can increase our wealth and lead to an easier life for all of us—a life not dependent upon government handouts, but upon a sound and a profitable agriculture. **END**

Pipe doorsill

A 1¼" pipe embedded part way in concrete makes a handy doorsill. The door rests on it tightly, but doesn't stick. The pipe won't rot or wear away as do wooden doorsills. And you won't stub your toe when going in or out of the building.

This doorsill was built by Ed Reuter, Oconomowoc, Wisconsin.—*C. P. Fox.*



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Spark plugs also look alike, but

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★ **AIRCRAFT TYPE INSULATOR**—improved electrical insulation offers maximum resistance to heat and reduces fouling.

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IF YOU know your stars of Hollywood, you will identify enchanting Rosalind Russell as the girl at the right. The girl at the left is beautiful Florence Williams of Brooklyn, New York. You'll be correct, too, when you switch to Auto-Lite Transport Spark Plugs. Money cannot buy a better spark plug.

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Auto-Lite Spark Plugs—Patented U.S.A.

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Double Barrel Shotgun
12, 16, 20 and .410 gauge

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STOCKS . . . . New redesigned wood stocks and fore-ends, walnut finish, on both Model 94 and 311.

Two-way, top snap action for *either* right or left hand shooters, is a feature of the Stevens Model 94 "single." Lock-up is positive and rigid—can't shoot loose. Unbreakable coil springs . . . chrome molybdenum firing pins and *positive automatic* ejector are other quality features.

Barrel and Lug forged in one piece — one of many fine gun features found in these low priced Stevens models . . . features which mean unfailing dependability . . . top shooting qualities.

There's no better, more reliable double barrel shotgun action, *regardless* of price than in the Stevens Model 311 "double." The coil spring—hammer—sear mechanism of proven design (used in most expensive double guns) gives clean, crisp, trigger pulls—split second hammer fall.

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You get more shotgun for your dollar, *plus* more fine gun features, when you buy a Stevens double or single barrel shotgun. That statement has been proved by the tens of thousands of shooters, over the years, who have made these guns their first choice. And, by the fact that Savage is the world's largest builder of single and double barrel shotguns.

Plan right now to own a Stevens "double" or "single" this year—for pest and sports shooting. See these "first in the field" values at your dealer's. *Write for free catalog describing the complete line of Savage, Stevens and Fox Shotguns and Rifles.*

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STATIONERS EXCHANGE, HELOTES 22, TEXAS

Wheelbarrow sideboards

For hauling light material such as straw or corncobs, sideboards on a wheelbarrow will cut down the number of trips you have to make. Tom Reuter, Waukesha County, Wisconsin, built the sideboards, above, out of 1"x10" boards.

The iron strips were made from ⅛"x1" material. Two of these strips were screwed to each side of the board, then bent to follow the contour of the wheelbarrow sides. Each sideboard slips off easily when not in use.—*C. P. Fox.*

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D2 starts Spring *2 WEEKS* earlier ...and cuts the fuel bill $400.00

—FOR LEE RINKER, WALKERTON, INDIANA

▶ A strategic two weeks before weather-bound power emerges from "hibernation," this Diesel D2's broad tracks are prancing along. Getting traction to pull normal loads, even across soft spots. Coaxing fields into the notion of making bumper crops.

And giving Lee Rinker, Walkerton, Indiana, the priceless satisfaction of doing something profitable about the weather!

"Wet spots are common on my low ground," says Mr. Rinker, "but the D2 goes anyhow, and gives me a full two weeks advantage. Also, the D2's extra drawbar power saves several days in a season. It can easily plow 15 acres, or double-disk and harrow 65 acres, in a 10-hour day.

"Compared to spark-ignition tractor power, my D2 saves about 2/3 on fuel. It cuts my fuel bills over $400.00 in an average year. I'd hate to farm again without this Diesel tractor's economy advantage."

This traction to beat weather also delivers a big pulling power bonus. And the heavy-duty Diesel engine that boosts work capacity also is the world's economy champion. No wonder you multiply your profit chances —when you mount the "Caterpillar" Diesel's deep-cushioned seat.

Why not see your "Caterpillar" Dealer soon, about a demonstration of the size that fits your needs? Request Form S-402 for booklet on Land Preparation.

CATERPILLAR TRACTOR CO., PEORIA, ILLINOIS

★ Price of the standard 50-inch gauge Diesel D2 is only $3415 f.o.b. Peoria, Ill. Price subject to change without notice.

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DIESEL ENGINES • TRACTORS • MOTOR GRADERS
EARTHMOVING EQUIPMENT

BE A CHAMPION DRIVER

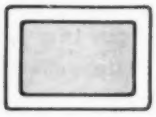
LEARN THE "SIGN LANGUAGE" OF THE HIGHWAY!

1. The meaning of a highway sign is generally indicated by its shape. Thus the octagonal sign means STOP.

2. A round sign indicates a RAILROAD CROSSING and forewarns you to approach it with the necessary caution.

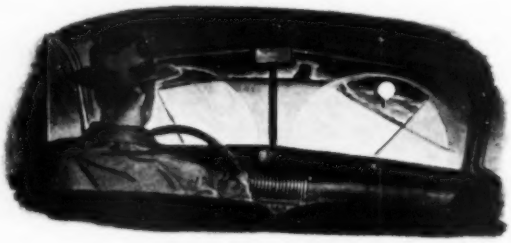
3. A diamond shaped sign tells you to SLOW DOWN—indicating a dangerous curve, hill, or similar hazard.

4. A square sign normally indicates SCHOOL ZONE or other areas involving hazards to pedestrians.



5. A rectangular sign normally gives TRAFFIC DIRECTIONS—Keep To Right, No Left Turn, No Parking, etc.

On a dark, rainy night like this, the shape of the sign ahead tells this driver that a railroad crossing lies ahead. It warns him in time to **approach it with caution.**



Because children are inclined to be heedless, drivers should be particularly watchful for signs indicating school zones. Caution and courtesy at all times distinguish **the Champion driver.**

A Champion driver is attentive to little things that pay big dividends in the pleasure, security, economy and dependability that you derive from your car. Spark plugs contribute largely to these dividends. Check them at regular intervals and replace them every 10,000 miles. They quickly pay for themselves. The great majority of champion drivers prefer and use Champions—the spark plugs champions use.

. . . BE A CHAMPION DRIVER—IT PAYS!

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"I used the same identical set of Champion Spark Plugs in winning four major speedboat events last year, including the international Harmsworth race."

—R. Stanley Dollar

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Listen to the CHAMPION ROLL CALL . . . Harry Wismer's fast sportscast every Friday night, over the ABC network

What you can do about *hernia*

Be careful handling difficult animals

"Rupture" need no longer make your life miserable nor keep you inactive, because proper medical care can be of great help. See your family doctor for a complete checkup

By W. W. Bauer, M. D., Director, Bureau of Health Education, American Medical Association

Probably at some time or another a member of your family or one of your neighbors has been handicapped by hernia. Oftentimes this ailment has been neglected and has hindered the victim in his work, whereas good medical treatment or surgery might have brought him back almost to "normal."

Hernia is medical language for what we commonly call "rupture." It is not really a rupture—a bursting—in the ordinary sense of the word. It means a protrusion of an internal organ from the cavity where it belongs. It usually is applied to the abdominal organs, but the term may apply elsewhere.

Thus, there can be hernias or protrusions of the brain. The organ need not necessarily be out of place at all times. More hernias occur in men than in women. In the majority of cases, the hernia is due to a defect in body development. Such defects often are hereditary. Hernias have a tendency to be more frequent in the offspring of those who have had them than in the descendants of those who have not.

Among the most famous hernias is the one called the "upside-down stomach." This name resulted from an attempt to explain to the nonmedical reader, in terms which he was supposed to understand, a condition that could have been described more simply by just telling exactly what it was.

It was a defect in the muscular wall—the diaphragm—which separates the chest from the abdomen. This allows the stomach to protrude upward into the chest, carrying a loop of intestine with it. The stomach bulges upward, rather than the lungs downward, because abdominal pressure is high, while the lungs operate in a partial vacuum.

Other varieties of hernia are those which occur in babies at the navel. These used to be treated, and still are, by strapping a half-dollar over the area until the muscles come together and close the soft spot. Infantile hernias usually get well by themselves. There may be hernias in operative wounds, especially where there has been infection and drains have had to be inserted. Women may have hernias, called femoral because they occur at the upper extremity of the leg.

But the common hernia is the inguinal or groin [*Turn to page 106*

Don't lift loads from wrong position

Use wheels to carry heavy objects

Go easy on twisting, pushing

GILLETTES GET THINGS DONE IN A HURRY... better traction, more freedom from blowouts, dependable performance—all add up to a faster day's work. More miles for your money too!

HERE'S WHAT GILLETTES CAN DO FOR YOU:

ON YOUR TRACTOR the GILLETTE POWER BAR delivers more work—deeper traction for faster performance.

ON YOUR TRUCK the GILLETTE SUPER RIBBED shoulders heavier loads for more safe miles—over *any* road surface.

ON YOUR CAR the GILLETTE PRESIDENT gives you all the comfort of low pressure—PLUS up to 30% more miles with its "cold rubber" tread.

WEAR BETTER *because they're* **BUILT BETTER**

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YOU NEVER SAW SUCH BRIGHT LOOKING CUPBOARDS"

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ALCOA ALUMINUM

Look for this shield on aluminum paints made by many paint manufacturers using **ALCOA PIGMENTS**

Hernia

[*From page 105*]

hernia, most often found among men, and particularly among those who have to do hard, physical labor.

While there may be rare exceptions, it is probable that few hernias occur unless there is at least some small measure of structural malformation. The immediate cause appears to be, and often is, a heavy or sudden physical burden such as lifting or straining at great weights like hay bales, pushing heavy equipment, pitching hay, or handling animals.

Any strain which raises pressure within the abdominal cavity, even the effort to overcome stubborn constipation, may result in a hernia if there is weakness there in the first place.

Structural differences between men and women in the groin area are what allow more hernias in the male than in the female. In the male, the spermatic cord enters the abdominal cavity obliquely through the groin from the scrotum. The cord consists of an artery, a vein, a nerve, and spermatic duct, plus muscular and other tissue. It is a sizable structure which cannot be compressed without interfering with circulation or the function of the spermatic duct.

The passageway between the tissues in the groin, through which the spermatic cord passes, is known as the inguinal canal; hence the term inguinal hernia for the common type. In women, the corresponding structure is merely a ligament requiring practically no canal through which to pass.

Everybody knows woman's sex glands are internal, whereas man's are external. But man's sex glands were internal, too, before he was born, and in some individuals remain so for a time after birth.

Their path from within the body to their adult position in the scrotum is through this same inguinal canal. Normally, the canal closes when the testicles have passed through. It is when this opening fails to close that the difficulty begins. Many boys have fairly open canals at birth, and in some there is a definite hernia, with protruding intestine.

Most of these take care of themselves as the infant grows, and seldom does anything need to be done about them. But if the boy grows up and continues to have this protrusion, then something has to be done about it.

Aside from those who have obvious hernias from adolescence on, there exists a larger number without any apparent sign of such a condition, until they run into employment in farming or heavy industry, or until a medical examination discloses the condition.

Where there is an excessively wide canal, the physician's finger can detect the opening. When the patient coughs or otherwise puts pressure on his abdomen, the impulse or push of the internal organs can be felt. Protrusion of abdominal organs into such a widened canal may exist in any degree from a mere bulging at the internal end to the presence of one or more large loops of bowel in the scrotal sac.

In the abdomen, there is a large structure best described as a membrane or curtain of fat, called the omentum, which hangs in front of the abdominal organs and helps protect them. This, too,

may be caught in the inguinal canal.

If this is as far as it goes, there is merely discomfort, sometimes mild pain, and a disadvantage in lifting, carrying, pushing, or pulling. If this were all, many hernias could be let alone. But this is *not* all. There is danger of strangulation.

Strangulation of a hernia means that structures in the canal have become crowded or twisted so that circulation is cut off, or the progress of bowel contents is obstructed, or other interference has occurred, depending on which abdominal organs have become entangled.

Impeded circulation, if not promptly restored, causes death of the affected tissues. This causes an immediate and serious emergency, and is one of the reasons why it usually is unsafe to delay treatment for hernias. When strangulation occurs, there are alarming symptoms—pain, fever, vomiting, possibly collapse.

The treatment of a hernia depends on its severity, the age and condition of the patient, and his occupation. One might advise a patient with a potential hernia, detectable only by physical examination, to do nothing, if he were a desk worker. But he should also be warned against any strains.

In a farmer, who must be in top physical trim, even such a potential hernia should be treated. Obviously, the plainly apparent hernias, with protrusion, occurring in the farmer or others in his family, require correction.

The only hernias for which correction would not be advised would be those which afflict persons who could not tolerate the necessary treatment, or long neglected hernias which have passed beyond the possibility of successful treatment.

Most hernias require surgical correction. In a few instances, small and recent hernias in exceptionally well-muscled persons can be treated by injection, but this calls for a warning: The old-time quack who injected hernias, using paraffin wax which hardened in the tissues and did no good whatever, is quite different from a modern surgeon who injects substances which close the hernia by stimulating the growth of scar tissue.

Well-qualified surgeons capable of doing a surgical repair may in selected instances choose to use the injection method, but a patient will be well advised not to put himself in the hands of any doctor who uses injections exclusively, especially if that doctor advertises.

Surgery for hernia should not be a frightening matter, in most cases. It is, of course, a major operation, but it often can be done under local anesthesia.

Newer techniques of local plastic reconstruction make long bed rest less necessary than formerly, except where a very large hernia, or one long neglected, has had to be dealt with. The modern trend is toward getting the patient up and about early after operations.

It still remains advisable to avoid really heavy work for from six weeks to three months, except in the milder cases. The individual patient must be advised about such matters by his physician.

When surgical treatment of a hernia is inadvisable, more conservative measures must be taken. There are two objectives here. First is the safety of the patient, particularly as regards the possibilities of strangulation. Second, comfort is an important consideration, especially for the

[*Turn to page 109*

with STONEWALL BOARD

Your barn . . . and other buildings . . . can be made *better* than new by re-siding with Ruberoid Stonewall Board. Better . . . because these asbestos-cement sheets are fireproof, rot-proof and never need painting! Nailed and battened right over the old siding, Stonewall makes a handsome, stronger building and provides *permanent* protection without maintenance.

Stonewall can't rust or corrode and it's termite-proof. Made of Portland cement reinforced with asbestos, the board has rock-like durability and a flexible strength which makes it an ideal building material . . . suitable for both indoor and outdoor use.

The low cost of re-modeling your barn with Stonewall is the best news of all. These big 4' x 8' sheets go up fast . . . they're nailed and sawed like wood . . . or can be scored and broken to size even quicker than sawing. The booklet offered in the coupon below will tell you all about it. It's free . . . send for it today!

FAST WORK! With a minimum of preparation and equipment you'll find Stonewall barn re-siding is a simple carpentry job.

INTERIORS, TOO! Walls and ceilings lined with fireproof Stonewall Board are easy to keep clean—need no painting—rot-proof.

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Building Materials for Farm, Home and Industry

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Yes, Mobiloil has all three modern oil qualities. It's *anti-acid* . . . it's *detergent* . . . it has *high V. I.* Why accept anything less? Insist on the world's best-known and largest-selling motor oil. Keep *all* farm engines Mobiloil Clean!

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Get Famous Mobilgrease and Mobilube Gear Oil, too!

Hernia

[*From page 107*]

patient who by reason of age, poor physical status, or an exceptionally bad hernia is denied surgery, but must nevertheless continue with some sort of work. In these circumstances, one must use supports, commonly known as trusses.

A truss can be a blessing or an abomination. Properly designed by an honest, competent maker and fitted by an experienced physician, the truss is a useful device. But the patient wearing it should continue under medical supervision.

The Council on Physical Medicine of the American Medical Association has given consideration to the problem of surgical supports, including trusses, braces, and corsets, and has allowed the use of its Seal of Acceptance on products which meet its requirements. Devices offered with this Seal of Acceptance are reliable, under medical supervision.

A truss is simply a pad of soft leather intended to cover and to close the hernial opening and thus retain the internal organs where they belong. Certain devices are necessary to hold it in place. Some trusses are made with straps and buckles, others with steel springs.

The commercial advertising of some of these devices is amusing—or would be if getting a proper truss were not a serious matter. Manufacturers of trusses held in place by springs often advertise "no straps or buckles," and vice versa. The simple truth is that the pad must be held in place either by straps or by a spring, and each method has its advantages and disadvantages, depending on the location. A physician should specify the kind of support required and its exact type and description. The necessary measurements should be taken by the doctor.

Now, is there any way to prevent hernia? Certainly, there are simple and sensible precautions. Excessively heavy objects, like bales of hay, barrels of supplies, bags of cement, feed, and the like, should be handled by mechanical means such as hoists or levers. Heavy vehicles should not be pulled by hand, but handled with draft animal or mechanical power.

There are good and bad ways to carry loads which fall within the reasonable capacity of the human body to handle. The general principle is to put the load on the back and shoulders whenever possible. Sacks are better carried on the shoulders than in the arms. When lifting, keep the back straight and get the power from extension of the legs. Push in preference to pulling whenever possible, applying the leg power through the back and shoulders to the object.

When in doubt as to your capacity to lift and carry, use a mechanical aid. Farmers who have had a hernia repaired should exercise special care, because repeat operations are difficult.

Young people growing up on the farm, especially boys, should have special examinations with hernia in mind if their family history shows a tendency toward this condition. Medical examinations are good insurance for good health, anyway, even if no hernia is discovered.

With few exceptions, a competent surgeon can take care of the hernia problem easily, safely, and with minimum loss of time. So have a checkup by your family doctor. It's good health insurance. **END**

Unload a Ton-a-Minute with a Pick POWER-BOX

SAVE UP TO ONE HOUR ON EACH UNLOADING! Yes, many users report unloading "a ton-a-minute". Here is the efficient, modern way to keep pace with forage harvesters and other harvesting equipment and eliminate back-breaking labor.

PICK ALL-PURPOSE SELF-UNLOADING POWER BOXES cost far less than unloaders fashioned by neighborhood machine shops. They are *properly designed*, too! Sides of an 8' x 14' box can build up to 8' to serve any crop. Built-in, chain-driven, continuous metal-slat conveyor. Rear clutch control. Variety of styles. With or without power take-off. The line is thoroughly tested and unquestionably No. 1 in the field.

A Pick *Portable* Self-Unloader Equips Any Truck or Wagon in a Jiffy!

It takes only a minute to convert your trucks and wagons into temporary self-unloading units. Simply slide a PICK Portable Self-Unloader onto the platform. No bolts or screws to fasten. Just as quickly removed. The portable unit has a continuous, metal slat conveyor and is easily powered.

Power-Pack Harnesses Convenient Power Sources to Portable Self-Unloaders

The Power-Pack (left) also serves Power-Boxes not equipped with a power take-off. Can be driven by gas or electric motor. Universal joint shaft permits out-of-level operation.

Economy-style FORAGE BOXES — convertible from flat rack to 2', 4', 6', 8' heights.

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Get full facts now — be prepared to handle your first crop this low-cost, time-saving way.

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DEALER inquiries are invited for this nationally-distributed line.

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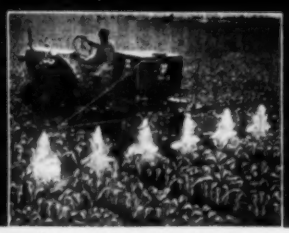
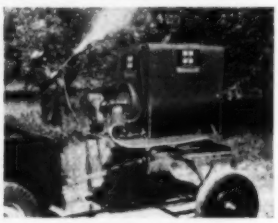


For borer and weed control in corn

For weed control in pastures

For roadside spraying

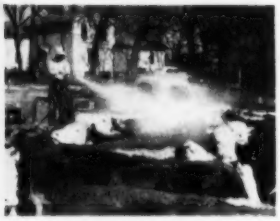
For brush destruction



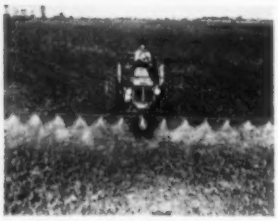
For fruit pest control

For spraying farm buildings

For insect control in field crops

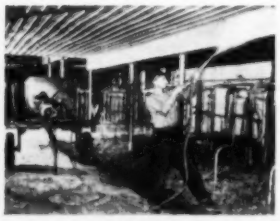


For livestock spraying



For insect control in pastures

For weed control in ditches



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1. **Unit capable of handling satisfactory volume of liquid as high as 8 G. P. M.**
2. **The necessary range of pressure to cover virtually all farm spraying jobs—0 to 700 P. S. I.**
3. **The ability to handle all types of spray liquids and wettable powders.**

Also remember, these sprayers are famous for their long, satisfactory low-cost service. For example, with Hudson's piston pump, there are no leather plungers or any gears to wear out. Self-powered, too, so that they can be used anywhere without tying up any other equipment.

Ask your nearest Hudson dealer today to show you these super-quality ALL-PURPOSE sprayers, or send coupon below for FREE literature!

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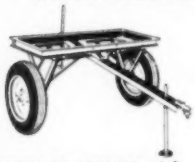
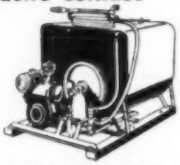
GARDEN SPRAYING • MOSQUITO CONTROL

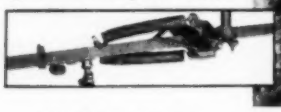


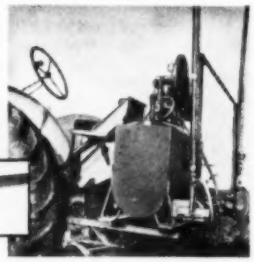
"ADAPTO" TRAILER. Adjustable tread for any row width. High clearance.



SKID MOUNTED SPRAYER. For trailer, truck, tractor, wagon. 50, 100, 150 gal.

HUDSON "NO-WHIP" MULTI-BOOM (Shown in vertical position at right). Rugged. Rigid. Works at any angle. Non-corroding brass nozzles and tubing for long life. Hinge (shown below) in position for field spraying. Strong steel springs keep boom in position—yet swing back to prevent breakage when hitting obstruction.





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Use your windmill for television

By Richard Fincham

Don't make scrap iron of your windmill tower after installing a pressure water system. You can use the tower for a television antenna.

A windmill tower has several advantages for use as a television tower. First, it is strong enough to withstand high winds. Next, the windmill requires a comparatively small base. Most commercial towers need several guy wires which obstruct a large area. But the most important advantage is that the windmill is already on your farm. This fact can mean a saving of from $1 to $3 per foot of height.

For best reception, the tower should be as close to the house as possible, not more than 100 feet away. However, if it is located not more than 200 feet from the television receiver, the use of a special low-loss line probably will give satisfactory results for reception from stations less than 75 miles away.

Readying the windmill for use as a television tower is easy. If the windmill tower is close enough to the receiver, remove the wheel and gearbox and bolt the antenna array on top.

It's best to place the antenna on top so that television signals from all directions can be picked up. There should be no obstruction between the antenna and the television transmitter because television signals travel in straight lines.

If the antenna is to be put on a windmill still in use, bolt the antenna array on the side of the tower below the wheel. Make sure this antenna array is at least 6 feet from the metal tower itself.

This one-array system is satisfactory when all signals come from the same direction. In areas where signals from all directions are picked up, it is necessary to have several arrays installed or to use a rotating antenna mast. END

This windmill is equipped with seven arrays, but one array, on a rotary mast, is all that would be necessary on your farm

FARM TIPS FROM SAM PHIPPS

"IN CASE OF FIRE I'VE GOT FOG!"

"Never had a serious fire," says Sam, "but I'm ready, just in case.—Bought a fog nozzle, like those the Navy uses. Attached to my orchard sprayer, it produces a fine, fog-like mist that actually blankets a fire."

"BUT THERE'S NO FOG IN OUR FUTURE"

"Money worries won't interfere with our work. I've cleared up two of them with my Mutual Life Insured Income program. You'll be provided for if I die. But if I'm around, we'll have an income for our old age!"

What about you?—Are you clearing up your family's future, now—while you are still insurable? Will they have financial security whether you're around or not?

Mutual Life's *Insured Income* service can help solve this big problem. Our Field Underwriter will assist you in figuring your family's money need if you should die and your own requirements if you live to old age. He can help you buy life insurance more economically, knowing exactly how much it provides in terms of monthly income, hired-help pay, education or taxes.

So have a chat with the Mutual Life Field Underwriter and take advantage of this practical plan.

FREE FARM ACCOUNT BOOK

Helps you budget your income for such essentials as life insurance. Send for a free copy of Sam's top grade Farm Account Book and keep records on important farm activities—livestock, crops, feeds, equipment costs, tax data, etc. Easy-to-follow instructions. Prepared by leading agricultural college, tested by practical farmers. Mail the coupon soon.

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COUNTY ..... STATE ..... NO. OF ACRES FARMED .....

How good are stalk cutters?

They help cut stalks ahead of the plow, but don't plan on getting rid of your borer problem with them. They won't do a complete killing job

By Dale Hull and Dale Woolsoncroft

One of the hottest subjects these days is how to control corn borers. Foremost in the discussion of mechanical means is the use of cornstalk cutters. (For the latest ideas on chemical controls, see "How to Beat the Borer," page 50.)

Our work takes us to many parts of Iowa, and we have seen many of these machines in use. We've dug up some of the studies carried out as long as 22 years ago by U.S.D.A. engineers—way back before we had low-cost insecticides.

U. S. corn borer invasion. When the corn borer first invaded the United States, farmers and scientists fought back with the only weapons they had—tillage tools and cleanup methods. These techniques had been recommended and used in Europe, and were the only controls known. That was when we first heard about clean plowing. Even the power take-off-driven stalk cutter was used then.

Last spring, the farmers in Marshall and Jasper counties, in Iowa, decided again to see if stalk cutters would give good borer control. They asked the extension entomologists and engineers of Iowa State College to work with them and set up three demonstrations.

All types were used. Almost all types of stalk cutters were represented in these trials. One type had horizontal knives which rotated over the stalk row. Another type consisted of knives or hammers rotating in a vertical position over the stalk row. One type was built like a hammer mill, and another built like the old buckbrush killer which had steel chains rotating on a shaft extended across two rows. Each of the last two machines covered the entire area between the rows.

Before the demonstrations, the entomologists made counts to determine how many corn borers per 100 stalks had lived over the winter. In one six-acre field, there were over 1,000,000 live corn borers. Each machine was assigned to work in a test land, and survival counts were made by students from the college. When Dr. John Lilly, research professor of entomology, had assembled the data from 17 trials, it was found that the chopper giving the poorest kill had reduced the borer population by only 17 percent. The one giving best kill accounted for 91 percent of the borers. The second best kill was 76 percent.

[*Turn to page 115*

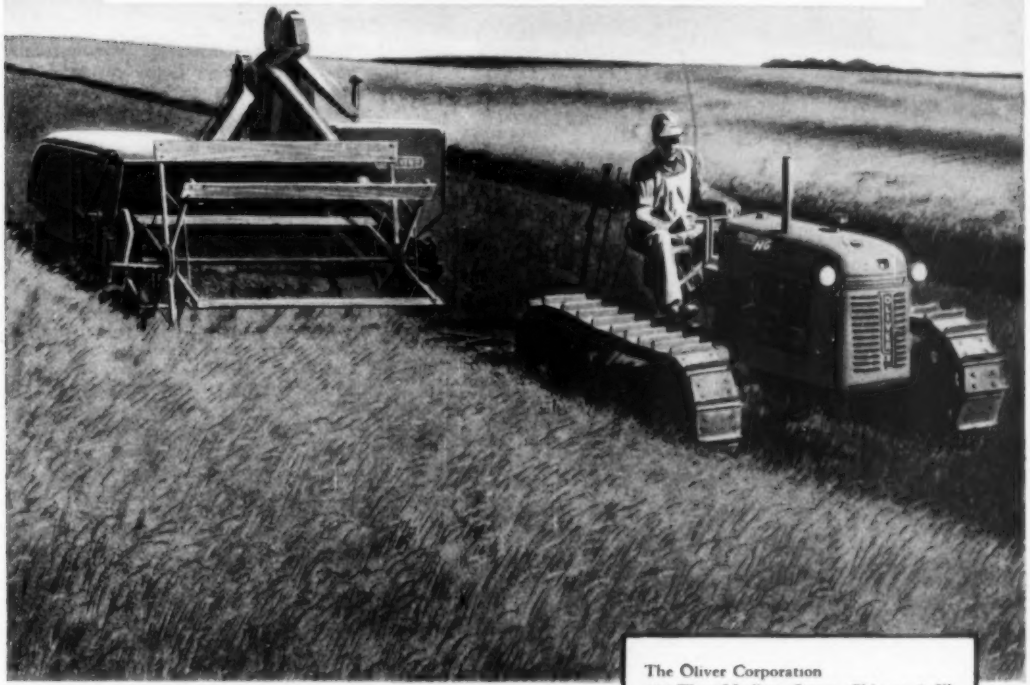
Teamed Up...

to Lick Tough Combining Conditions!

Thorough threshing and *unfaltering traction* to take you through! Here's the team that provides both to help you get hard-to-thresh crops out of wet, soggy lowlands . . . off of steep hillsides or sandy fields.

To speed up harvesting the Oliver Model 15 Grain Master is equipped with a full 6-foot header. "Straight-in-Line" construction sends the crop through "heads first." The "Man Behind the Gun"—a check plate at the rear of the long rasp-bar cylinder—sends most of the grain directly to the large cleaning unit before it gets a chance to mingle with straw or chaff.

See this compact, easily maneuvered outfit at your Oliver dealer's. The Oliver "Cletrac" Model "HG"—a perfect power unit for diversified practices—is available in four tread widths to handle every farm job. The Oliver Corporation, 400 West Madison Street, Chicago 6, Illinois.



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Oliver "66", "77" and "88" tractors are built in 6 basic types and 8 variations

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"My total cash outlay for feed was only $5.23 TO PRODUCE EACH 238-POUND HOG..."

Jesse Bradshaw, Peoria County, Ill.

Illinois farmer buys *only* necessary feed elements to slash costs of raising hogs

"I had plenty of good corn and oats last year for my hogs," says Jesse Bradshaw, "and I wanted to get my spring pigs on the early fall market. Of course, corn and oats alone wouldn't have done the job—but I didn't want to spend a lot of money for the proteins, minerals and vitamins my grain lacked.

"So, when my local MoorMan Man explained how Hog Mintrate contains only the things my grain lacks, and also how it would fit into my feeding program, I decided to give it a try.

"From the time my 8 gilts were bred, until they weaned their pigs, they each got a half-pound of Hog Mintrate a day with their corn and oats. I started creep-feeding the pigs on ground grains and Mintrate when they were 2 weeks old in addition to good pasture.

"I used a Mintrate-made supplement for the fattening hogs, and also gave them all the corn they wanted. My total bill for Hog Mintrate 45—the only feed I bought and which also included all the Mintrate the sows ate—was only $5.23 for each hog marketed, and they averaged 238 pounds when sold. I've never seen hogs do better at such low cost."

Like Jesse, you, too, can cut your hog feeding costs to bedrock with Hog Mintrate 45 because this highly-concentrated concentrate was developed to make local grains into potent, high-energy hog rations. It contains no filler, no grain or grain by-products. It is a highly-concentrated blend of only the proteins, minerals and vitamins hogs need with grain.

5 of its 6 proteins—tankage, meat scraps, blood meal, shrimp meal and fish meal—SUPPLY NATURAL APF. It is mineralized with MoorMan's famous *complete* hog minerals. And, it is fortified with Vitamin G (Riboflavin) for quick growth, niacin to prevent and overcome pellagra, and in winter, Vitamin D—the sunshine vitamin.

Ask your MoorMan Man how Hog Mintrate 45 fits into your feeding program. If no MoorMan Man is available, write Moorman Mfg. Co., Dept. R-4, Quincy, Ill.

MoorMan's

(SINCE 1885)

MAKERS OF PROTEIN AND MINERAL CONCENTRATES FARMERS NEED, BUT CANNOT RAISE OR PROCESS ON THE FARM

How good are stalk cutters?

[*From page 112*]

Wide variation of results. In comparison, two trials with a disc, covering the stalks four times, gave an average kill of 47 percent. The average kill for all stalk cutters in these trials was 53 percent. The trials were run in three conditions of stalk cover. On one farm, a part of the field had been hand-harvested. The second field was so infested with borers that the owner elected to hog the corn down, leaving the stalks broken in all directions with only a few scattered stalks standing. The third trial field was a typical stalk field left after machine harvesting.

Viewing the trials critically, several things were observed which might have caused the wide variation of results. Cutters which covered two rows with the hammers, chains, or flail bars rotating on a shaft extending across both rows seemed to have an advantage in the three types of cover, particularly in getting at stalks lying in the depressions between the rows. The machines using knives rotating in a horizontal position over the row seemed to leave too many stalks completely intact. The cutters having knives or rotors in a vertical position directly over the rows appeared to have the same disadvantage. Cutters using guides or tunnels to feed the stalks to the rotating knives or hammers tended to clog when run close to the ground over the row. All machines left stalks well flattened, but not necessarily well shredded.

Purchase of machine. We don't consider these trials at all complete. But they may help your thinking. If you plan to purchase a new machine, you have to justify its ownership. You have to answer these questions to your own satisfaction:

1. Will the stalk cutter kill enough corn borers to give control? Two-percent live borers surviving may, under ideal conditions, repopulate to the original infestation. We found only about half the borers were killed at the demonstrations. Of course, some folks think it worthwhile to cut the numbers in half.

2. Will plowing be easier if I use a stalk cutter? It may, in heavy stalk growths. Some research people, though, claim *any* money spent in disposing of cornstalks is wasted. In actual tests by the U.S.D.A., reported in Circular No. 592, they state that: "There was no apparent improvement in quality of plowing when stalks were cut up with a disc harrow or stalk cutter before plowing."

But even clean plowing and cleanup of host plant debris can give good control only if you can put a roof on your cornfields—so adult corn borer moths can't fly in from fence rows, weed patches, and your neighbor's stalk-covered oat fields.

3. Is there any advantage to owning a stalk cutter from a soil conservation standpoint? In many parts of the country, we have studied the effect of mulching crop residues—such as straw and stalks—to conserve the soil. Generally speaking, a good mulch cover will reduce soil loss to about 10 percent of that on clean-plowed land. Runoff of surface water is reduced by 30 to 60 percent, depending upon the physical characteristics of the soil. If stalk fields were cut in the fall, there is good reason to believe

[*Turn to page 117*

THIS 5 ROOM **ALADDIN** READI-CUT HOUSE $1492 FREIGHT PAID

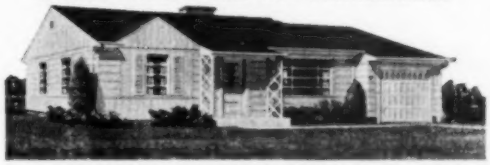
SAVE 4 PROFITS ON LUMBER, MILLWORK, HARDWARE AND LABOR

The Aladdin Readi-Cut System of Construction enables you to save 18% lumber waste and up to 30% labor costs, and guarantees you will receive the highest quality dry lumber and a COMPLETE house as specified. You can buy your **COMPLETE HOUSE, ALL IN ONE SHIPMENT,** direct from our mills and save the in-between profits.

HOW TO BEAT THE HIGH COST OF BUILDING

Every hour you can put in on the construction of your Aladdin home means a saving to you of from $2.00 to $3.00 per hour on its cost. That means a SAVING of from $15.00 to $18.00 for every day you work on it!**** Depending on the size of the house, the carpenter work sums up to from three hundred hours to twelve hundred hours.**** WITH MOST OF THE SKILLED LABOR ALREADY PERFORMED when you receive your Aladdin Readi-Cut, what an opportunity you have to bring down the cost of your new home to practically a pre-war level. Our drawings and instructions cover everything from the foundation up, so you can save any part, or even all labor costs.

ALADDIN HOUSES ARE NOT PREFABRICATED



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You can rely on the advertising in Successful Farming. It has received our guarantee. Read this guarantee on the index page.

Get rid of RUSTY WATER in your home.

The DIAMOND Iron Removal filter takes out all rust and other foreign matter, leaving water crystal-clear and palatable. Costs little, worth a lot. Write for free booklet giving full information.

Oshkosh Filter & Softener Co., Oshkosh, Wis.

A home planning service tailored to farm living is being offered by one store near you. See page 75.

Saves the day that makes the hay. Fluffs cut hay one swath from mower to speed natural aeration and curing. Retains leaves and carotene (Vitamin A)—beats weather hazards. Gains 24 hours over pre-Meyer method.

And Meyer Hay Conditioning saves time and labor—boosts field efficiency—makes your hay worth more. Request FREE Folder and dealer's name today!

THE MEYER MFG. CO.
Box 860, MORTON, ILLINOIS

"I USED ALCOA ROOFING BECAUSE IT CUTS DOWN THE UPKEEP"

EASY TO PUT ON — Here's a tough roofing sheet that goes up fast. It's solid Alcoa Aluminum all the way through. It's easy to handle, easy to cut and bend, easy to put on and nail. Because aluminum is light, you can put on more squares a day with less help.

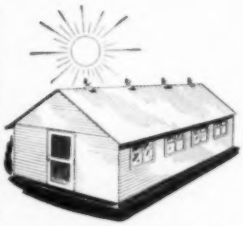
LASTS LONGER — Roofs of Alcoa Aluminum, put on over twenty-five years ago, still are in excellent condition. Properly installed, Alcoa Aluminum Roofing will give you years and years of trouble-free service. It can't rust away, never needs painting.

MORE PROTECTION — Winter winds, snow and ice, summer heat and storms don't affect the lasting qualities of Alcoa Roofing. It's the strongest, gauge for gauge, of any aluminum farm roofing. For more protection at less cost, less upkeep, buy Alcoa Roofing Sheet.

AVAILABLE EVERYWHERE — Order Alcoa Roofing from your dealer. It is available with either plain or embossed finish and all accessories for easy application. For more information and easy-to-use application instructions, mail the coupon below.

NEVER NEEDS PAINTING

You save and save with an Alcoa Aluminum Roof. It never needs painting because it can't rust away. Stands up in every kind of weather.

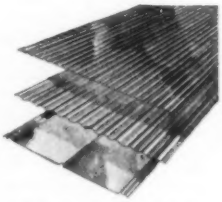


COOLER BUILDINGS • HEALTHIER STOCK

Tests at leading agricultural schools prove Alcoa Roofing throws off hot sunshine, keeps buildings cooler. Flocks and herds stay healthier—feed better.

WEIGHT OR PROTECTION?

For more protection, longer life at lower cost, roof with Alcoa Aluminum. It's the strongest, gauge for gauge, of any aluminum farm roofing.



ALL TYPES • ALL ACCESSORIES

Alcoa Roofing is available in two thicknesses, .019" and .024" and two finishes, plain or embossed—with all accessories, ridge roll, flat and preformed flashing, aluminum nails with weatherproof washers.

MAIL THIS COUPON TODAY!

ALCOA ALUMINUM

ROOFING SHEET

ALUMINUM COMPANY OF AMERICA
1449D GULF BLDG., PITTSBURGH 19, PA.

Please send me the free booklets on Alcoa Aluminum Roofing and instructions for proper and easy application.

Name _____

Address _____

City (P. O.) _____ State _____

My building supply dealer is: _____

How good are stalk cutters?

[*From page 115*]

that the mulching effect of the cut stalks would be an advantage. By cutting in the fall, many of the borers would be killed, and others might be more easily killed by lack of protection.

Other uses for stalk cutters. Some folks have found that the pulverized stalks tended to blow off the field during the winter, and have solved that problem by discing the pulverized stalks in. When they do this, they feel they do get faster rotting of the stalks into organic matter. The cutters have been found quite helpful in cutting heavy straw residue, both so it will plow under better and so that it will rot more quickly. Another use has been to break up heavy sweet clover or other cover crops before plowing them down. Here, too, some farmers report these crops plow down better and rot more quickly if they have been chopped.

As you can see, there is no one answer to your question, "Will a stalk cutter pay?" If you are buying it strictly for corn borer control, all the research so far indicates you will be disappointed. But any one of several other uses might make it a valuable tool for you. **END**

A gate built to last

This 2"x10" plank gate was built by Ed Reuter, Oconomowoc, Wisconsin, and will last a lifetime.

The lock on the gate is made from two pieces of pipe, one inside the other; just like an ordinary door bolt. A short piece of pipe is sunk into the 4"x4" gate jamb. The lock itself is bolted to the gate with strap iron.

When the lever welded to the inside pipe, or bolt, is raised from its locking notch, the bolt slides out of the gate jamb and releases the gate. A hole cut through the gate allows it to be opened easily from either side.—*C. P. Fox.*

Top picture shows close-up of gate lock. Bottom picture shows strong construction. When building, use bolts instead of nails

TRACTORS HAVE IT TOUGH IN SPRING!—Day after day you keep them plowing through the soil. To avoid time and money-wasting breakdowns when you can't afford them, keep engine-wrecking abrasives out of the oil stream. Check constantly to make sure there's always a clean, muck-free refill in the oil filter!

TOSS OUT DIRTY FILTERS!—Clogged, muck-laden elements like this just can't hold any more dirt. Abrasives go unchecked in the oil—snarl up your engine.

KEEP CLEAN REFILLS ON HAND!—Be sure they're Purolators, of course, because they trap *all* the abrasives, *all* the sludge. You insert them in just a few minutes.

Keep trucks and cars rolling, too! There's a Purolator Refill for practically every type of vehicle. Regardless of the make of filter, Purolator Refills give greater engine protection, filter *completely*. Be sure to see your tractor dealer now for Purolator *Micronic* Refills! Purolator Products, Inc., Rahway, N. J. and Toronto, Ontario, Canada.

PurOlator

*MICRONIC OIL FILTER

*Reg. U. S. Pat. Off.

...the oil filter that traps all the abrasives, all the sludge

Curtis cabinets made our kitchen new ... for only $3.07* a month

Why put up with an out-of-date kitchen—when it's so easy to have the last word in beauty and work-saving convenience with Curtis kitchen cabinet units? Curtis cabinets fit together quickly to suit any size or shape of kitchen. They are painted two coats at the factory—but you can give them the color of your choice—and you can change the color at will. Best of all, you can have Curtis quality—the superiority of *wood* cabinets—at a price you can easily afford!

Don't wait another day to start planning your new kitchen. Your Curtis dealer will help you choose the cabinet arrangement that best fits your needs. Mail the coupon now for our colorful kitchen idea booklet.

* *Actual price for cabinets as quoted by dealer in Des Moines, Iowa, on an open-end mortgage plan—does not include counter top or installation, but does include all hardware. Prices may vary in different sections of the country because of freight costs or local conditions. See your Curtis dealer for complete information.*

1866 CURTIS WOODWORK

CURTIS COMPANIES SERVICE BUREAU
407 Curtis Building
Clinton, Iowa

Here's 10c for your book, "It's Fun to Plan Your Kitchen."

Name .....

Address .....

City ..... *State* .....

Herbs make cooking more fun

Herbs give food a "kick" that is hard to beat—and they are fun to grow. You have used dill and parsley. Here is the how-to-grow for them and for other herbs guaranteed to make cooking more fun

By Donna Ashworth

How to grow		How to use
Annual. Grows 2 feet high. Lacelike umbels of white flowers (like carrots and parsnips) appear in July. Plant in warm, sunny spot in early spring. Thin to 3 plants per foot. Row 6 to 8 feet long will produce enough seeds for average family use.	**Anise**	Harvest umbels when seeds turn brown—usually late fall. Dry thoroughly; separate seeds; clean; and store. Use to flavor breads, cookies, candies, apple butter; use in powdered form in soups. Use the fresh leaves in salads, especially with apples.
Also called Melissa. Hardy perennial. Deep green leaves have a delicate lemon fragrance. White or yellowish flowers grow in clusters; bloom June through August. Plants grow 2 feet tall. Plant the seeds in May in a sunny spot, in not too rich soil. Avoid competition from surrounding weeds.	**Balm**	Fresh leaves add just the right "kick" to salads. Sprigs of it look delightfully cool in iced tea and other summer drinks. Also use dried to flavor soups, stews, sauces, and dressings. To dry, pick tops in early morning, and dry them in shade. Store in a clean place, free of dust and dirt.
Sweet basil is annual, low-growing, with green, purple, or variegated leaves. Plant seeds in early spring at the rate of 12 to 15 to the foot. Germination in 5 to 7 days. Give basil general garden care. Only a few feet of row will supply enough for average family use all season.	**Basil**	When plants begin to flower, cut tops 8 inches from ground; dry. Several cuttings may be made per season. Dried leaves and flowers add zest to tomato and egg dishes, green salads, cucumbers, cheese, shrimp. When plant is young, use tenderest leaves in fresh form.
Biennial, cultivated for its seed. Sow in late summer or early spring, 12 seeds to a foot. Thin to 6 or 8 plants to the foot. A 3- or 4-foot row will supply an ordinary family. Germination and growth are slower than for most herbs, so keep weeds under control. Any good garden soil will do.	**Caraway**	Harvest when fruiting umbels turn brown and before shattering begins. Dry thoroughly; separate, clean, and store seeds. Add their pungent flavor to potato salad, cabbage, cheese, cookies, bread, and roast pork (crush caraway and mix with lemon juice, oil, onions as a sauce).
Member of the onion family. Looks like onions, too. Propagated by dividing clumps of bulbs. Subdivide clumps every 3 years to prevent overcrowding. Care is the same as for onions. Keep a few clumps in pots for supply of fresh, slender leaves for all-winter use as a seasoning.	**Chive**	Harvest tender leaves or entire plant at any time. Use fresh. Has little flavor when dried. Chive has a more delicate flavor than onions. Puts a nippy flavor in salads, omelets, cream and cottage cheese, vegetables, cream soups, meat, and fish sauces—use wherever onions may be used.
Annual. Flowers grow in umbels similar to anise. Dill grows tall, so plant at edge of garden where it won't shade smaller plants. Sow seeds in spring or fall. Thin to 3 or 4 plants per foot. Germination takes 2 weeks. A few plants produce all you can possibly use for the pickling season.	**Dill**	Harvest umbels when fruit is fully developed but not yet brown. Use the leaves when fresh only; use fruiting tops either fresh or dried. Use fresh in dill butter to serve with fish, meat, sandwiches, for fish sauces and creamed chicken; use fresh or dried for making pickles.

[*Turn to page 120*

New Giant-Oven Range
Amazingly Low-Priced! Compact! Thrifty!

New Proof—You Can't Match A FRIGIDAIRE Range!

Manufacturer's Suggested Cash Price for Model RM-30, Illustrated Above

ONLY **$169.75**

Prices include delivery and placement, warranty and Federal Excise Tax. Local Tax and special wiring (if any) extra. Prices subject to change without notice.

Visit your Frigidaire Dealer. Look for his name in your Classified Phone Directory. Or write Frigidaire Division of General Motors, Dayton 1, Ohio. In Canada, Leaside 12, Ont.

Frigidaire Electric Ranges • Automatic Washer • Electric Dehumidifier Clothes Dryer • Electric Ironer • Refrigerators • Air Conditioners Electric Water Heaters • Kitchen Cabinets and Sinks • Food Freezers

This emblem on a Frigidaire Electric Range is your assurance of the same measure of convenience, economy, dependability and beauty that has made the Frigidaire Refrigerator America's No. 1 Refrigerator.

FRIGIDAIRE
"Thrifty-30" Electric Ranges

HERE's a completely new idea in electric ranges—designed for farm kitchens. It's a *big* range in everything that counts. You get extra cooking capacity for big harvest meals—but its giant oven uses no extra current. And you get Frigidaire quality construction plus important advantages of much more costly ranges. Yet this "Thrifty-30" Range is *only 30" wide*—and sensationally low in price!

Look What's New—Inside and Out!

NEW Thrifty Giant Oven—biggest in any household range—6,200 cubic inches—big enough for 6 pies! Heavily insulated on all 6 sides—cooks more food with no more current! Oven stretches clear across the range—provides more space up front. One-piece oven—porcelain rust-proof finish. Sliding shelves adjust to 5 positions. Counterbalanced door.

NEW High-Speed, Waist-High Broiler gets steaks just right! The speedy broiler unit is recessed in oven top—out of the way. Porcelain roasting and broiling pan—smokeless-type.

NEW 5-Speed Radiantube Cooking Units cook faster than ever—use less current. 4 standard-size units—including an extra-big one. Units swing up, porcelain drip trays lift out for easy cleaning.

NEW Beauty—styled by Raymond Loewy. Striking slanted front—high back-panel—one-piece Flowing-Top of acid-resisting porcelain. The snowy-white Lifetime Porcelain finish, even on the sides of the range, is rust-proof, won't discolor. Switch knobs are out front—easy to read and use.

NEW Cook-Master (on Model RM-35, shown below) combines in one unit the controls for automatic oven cooking, a Cooking-Top Lamp, and kitchen clock. Gleaming chromium trim.

NEW Super-Size Utensil Drawer (on Model RM-35). Full-width—located right below the oven. Slides silently on triple Nylon rollers.

Model RM-35—with Cook-Master and Utensil Drawer—Manufacturer's Suggested Cash Price—**$199.75**

All Yours for less than 1¢ a day!

At least one hour of EXTRA freedom from kitchen drudgery every day, because with PRESTO Cooking, *all* foods are ready to serve in one-fourth of ordinary cooking time.

More nourishing, more appetizing meals, with less costly foods ... because PRESTO Cooking saves more of the natural vitamins, minerals, garden-and-orchard fresh flavors and colors in foods. Even less costly cuts of meat and fowl are cooked to delicious tenderness ... *not* in hours, but in mere minutes.

Less cooking fuel costs ... because PRESTO Cooking is so speedy, even large family-size meals are ready to serve in a "jiffy".

For Real Cooking Pleasure and Economy, Get ...

Guaranteed by Good Housekeeping

Presto COOKERS

Millions of homemakers have said "goodbye" forever, to old-fashioned cooking methods. Now they use PRESTO COOKERS!

More PRESTO COOKERS are now in use in American homes than all other makes of pressure cookers combined, because only these "*best-of-all kitchen helpers*" are equipped with the 5-10-15 lb. PRESSURE-TRU INDICATOR, the HOMEC Seal, the COMBINATION ANTI-VACUUM VALVE and OVER-PRESSURE PLUG, which makes them so easy ... so safe ... so wonderful to use.

Get one, or a set of PRESTO COOKERS at the low prices asked for them, now. On sale at quality housewares dealers, everywhere.

PRESTO COOKERS are priced from $10.95* and are available in 3, 4, 6, 12, 16, and 21-quart sizes and the "FRY-MASTER".

*SLIGHTLY HIGHER WESTERN ZONE

NATIONAL PRESSURE COOKER COMPANY
Eau Claire, Wisconsin
World's Largest Manufacturer of Pressure Cookers and Canners

Herbs make cooking more fun

[*From page 118*]

	How to grow	How to use
Horse-radish	Perennial. Plants are coarse and weedy-looking with large leaves and deep, branching roots. Plant roots in the spring or whenever you dig the roots for harvest. Use smallest roots; set them, big end up, 2 to 5 inches deep and 3 feet apart in rich soil.	Dig roots in cool months—September through April—for best flavor. Store in cellar or earth to keep from shriveling. Oldest roots are best. When ready to use the roots, grind them and serve as a relish with meats and fish; also use in pickle recipes.
Marjoram	Perennial. (Annual in the North.) A low, bushy plant with tiny leaves and pinkish-mauve flowers; makes a good edging for the herb garden. Sow in early spring; transplant to permanent location when 2 to 3 inches high. Space sweet marjoram 6 to 8 inches apart; space pot and wild marjoram 12 inches apart. You'll need only a few plants.	Cut tops when blooming begins, once or twice afterward. Clean leaves; dry rapidly; store for winter use. Fresh leaves may be used as needed during the season. The mild, sweet flavor is especially good in stews, chopped meat dishes, liver, egg dishes, dressings, and roasts; marjoram adds a distinct flavor to vegetables, such as potatoes and beans.
Parsley	Biennial. Small, 5-inch plants are ideal for edging herb bed. Has fernlike green leaves which are used for seasoning. Sow seeds inside in spring; transplant 6 inches apart in the garden. For fresh leaves all winter, pot and keep in kitchen window.	Leaves usually are cut as needed and used fresh. Flavor is just as good, however, in dried form. Fresh leaves are just right as a touch of green garnish on the meat plate. Also a tasty garnish in soups, vegetables, and many salads.
Sage	Perennial. Plants grow 2 feet high, have oval, gray-green, hairy leaves. Blooms in June and July. Propagation may be from seeds, stem cuttings, or crown divisions. Seeds should be planted indoors in spring and transplanted to the garden when 2 or 3 inches high. However, propagation by taking cuttings from dependable plants is best. A few plants set in the corner of the garden or in a perennial flower bed will do for ordinary family use. Prune out deadwood in the spring. Remove, replace poor plants.	Harvest 6 to 8 inches of top growth about twice during season. Do this before the plant blooms. Make last harvest some time before frost for the good of the plant. To dry, tie plant tops in small bundles and dry in a well-ventilated room. If leaves are dusty, wash in cold water before drying. When dry, remove leaves and pack in closed container. The strong, pungent leaves are popular used with onion for stuffing pork and fowl. Also use in sausage, cheese, fish chowder, sage tea. Use sparingly.
Spearmint	Perennial. It is best to propagate spearmint by runners because plants produced by seeds are not uniform. For new bed, set runners out in moist, fertile soil in early spring. Confine the beds by setting boards several inches into the ground around the bed. If this is not done, underground runners soon will spread to take over the garden. Since plants are so hardy, no special care is necessary except weeding. Plants grow to a height of 2 feet, have broad leaves.	Fresh green sprigs are available from early spring to late fall. Cut leaves and flowering tops for drying when flowering starts. Hang in bundles or spread on screen; dry in shade. Remove excess stems before packing in a closed container. The leaves impart their pleasing flavor to lamb, peas, cream of pea soup, boiled new potatoes, carrots, tea, and fruit drinks. Serve mint sauce—a tasty mixture of spearmint leaves minced in vinegar and sugar—with roasts.
Tarragon	Perennial. Plants are bushy, grow narrow green leaves. About 2 feet tall. Be sure to get true French tarragon—Russian tarragon is bitter. Plants are propagated easily by root or crown divisions. Dig the roots in early spring. Divide, leaving 2 shoots with roots on each piece. Set in rows 3 feet apart and at intervals of 1 foot in the row. Every 3 years, subdivide the large crown that soon forms. Cultivated plants rarely bloom. A few plants will supply an ordinary family.	After the plants become established, the leaves and tender tops can be harvested throughout the growing season. Use fresh or dry for winter. Dry both leaves and tops rapidly, away from light; otherwise they will turn dark. Store dried leaves in sealed glass jars to prevent loss of essential oil. The sharp, tangy fresh leaves add a distinct flavor to green salads, salad dressings, vinegars, fish sauces, tartare sauce, eggs, and pickles. Use dried leaves in soups and sauces. **END**

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NOW—a 4-oz. jar

SAVES *At least* 20¢ *a* LB.

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NESCAFÉ* FOR PURE COFFEE ENJOYMENT
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PARENTS!

Give a boost to your child's future with **NABISCO SHREDDED WHEAT!** It's America's great body-building breakfast because

Make it a 100% whole wheat breakfast! Hearty, *naturally* good NABISCO SHREDDED WHEAT — with all the wheat as nature intended — even bran and wheat germ! Get the original Niagara Falls product, America's favorite for generations — served either hot or cold!

NABISCO SHREDDED WHEAT and MILK will help provide—

.....**Carbohydrates** — for ENERGY at study and play.

..**Calcium** — for building STRONG TEETH & BONES.

..**Protein** — for nourishing MUSCLES and TISSUES.

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.....**Iron** — important for red BLOOD.

START GIVING YOUR FAMILY THESE BENEFITS TOMORROW!

NATIONAL BISCUIT COMPANY

the breakfast full of **POWER** from Niagara Falls!

A tip to parents with question-happy children

By Julia Wolfe

"Why is the ladder up by that house?" asks my little son.

"I *wonder* why it is there?" I say in an animated tone.

"So men can get up on the house!" the little boy announces, triumphantly.

But I persist: "But why should they wish to get up there?"

The child starts to think and hits on several reasons why the ladder should be there. In this process, we satisfy curiosity and build reasoning power.

If we stop to think of it, we'll admit that a child's questions are a common form of speech and that most of them are ways of learning about the world in which he lives. There are several reasons for his questions—and there are idle questions (though not so many of them) as well as really important ones! The questions asked sincerely, in a desire to know, might be something like "Why do the chickens run away from me?" This type of question calls for an explanation of how the child frightened the chickens.

Remember, in answering a child's questions, that your answers will be in words. But the words will have no meaning unless the child's mental maturity and experiences give them meaning.

If your child is too young to understand fright, or has never realized that animals can be frightened, you must explain why the chickens ran away from him in terms of "Remember yesterday when the dog barked at you and you ran in the house?" A simple, easy-to-understand explanation, related to the child's recent experience, will give him a clear understanding of why the chickens ran.

Note the way he accepts your answer. The answer to a question sincerely asked and concerning a puzzling situation in his environment will bring him pleasure. He will pause a moment to absorb his new knowledge, then go on to his next question.

The child who leans on his father's knee and solemnly asks, "Why don't you shave?" may be begging for attention or asking for sociability. He finds such a question an easy way to start a conversation with Dad.

A simple answer—"I'm going to in a little while"—may satisfy the child. However, if he is earnestly seeking sociability, the father may be plagued with more questions unless he takes the cue from his son and starts a conversation.

Idle questions are merely a way of passing time for the child, and the answers frequently are known to him. The idle questions usually are the ones adults find annoying and irritating, because a child naturally resorts to such questions instead of thinking out solutions for himself. This is the case where the parent can

answer by asking the child, "Why do you think the ladder is up against the house?"

Such a question as, "Why do the bees-buzz, bees-buzz, bees-buzz?" is, for the child, a game having the elements of rhythmical chanting. He is experimenting with sound and likes the feeling of the words in his mouth. "They buzz bee-cause, buzz bee-cause, buzz bee-cause" will make you a partner in his game.

Often questions are asked merely to confirm something he already knows.

"What are you doing?" he asks.

"Peeling potatoes."

"Why?"

"To take off the skins."

In such a case, the questions are rapid-fire, and a brief answer will do.

Encourage the child to find his own answers as often as possible. When he does so, he has taken the first step in learning to reason—opening a wide field of knowledge for the child and leading to peace of mind for the parents. **END**

Spring

Glistening white; runaway kite,
Against the blue of the sky.
Thwack of a ball against a bat,
With the catcher standing by.
Marbles aimed at a chalk-made ring,
Coats flung far in a burst of joy.
You can tell it is really spring
Just by watching a little boy.

—Letty Moon

Farmer Boy

Feet dangling in the creek, he sits to wait—
A boy, half-hidden in the scrubby oak.
A pert-eared dog, a rusty can of bait,
A stout tin box of lunch, perhaps invoke
An angler's luck. Atop a white oak's spar
A lookout crow, unbid, makes his survey;
Although well-meant, his raucous warnings mar
The drowsy stillness of the summer day.
Then suddenly, the golden spell is gone—
The dog's ears droop, the boy stands strong and straight,
And as the wily fishes scuttle on
So dart his bright young dreams; his chores await!

—Helen Baker Adams

The Whatnot

Its graduated shelves were made
To fit the corner of a room.
The wood was dark mahogany,
Its highlights glittered through the gloom
Of the shaded parlor, and it bore
Our precious treasures: a choice book,
A fan of sandalwood, a ship,
A Dresden shepherdess, her crook
Tied with a china bow; a box
Holding a turtle on a spring
That quivered at the slightest move,
And oh, the loveliest frail thing;
A wreath of waxen flowers held
Within a pale clasped hand—so much
I wanted to caress that hand!
But these were things I dared not touch.

The whatnot took its lonely way
Along the attic's darkened stair.
It has been gone for many a year,
Our treasures scattered everywhere,
But still across the years I see
A little girl who knew she must
Not touch a thing except to wipe
Each shining surface free from dust.

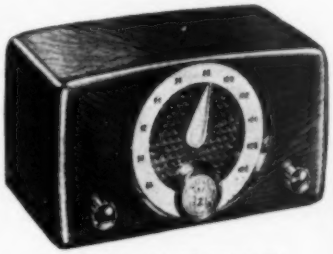
—Grace Noll Crowell

Look What You'll be Missing

without Zenith's New Super-Sensitive FM

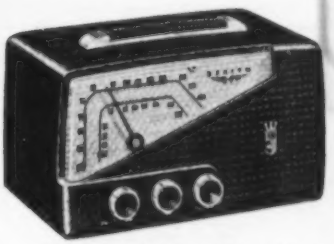
- Sharp, clear static-free listening pleasure day and night—during the worst storms—summer or winter!
- New longer-range reception—gets more stations and gets them better, even in remote areas and on weak signals!
- A greater variety of baseball, basketball and other local sports—plus news, weather, market reports and other programs not carried by AM stations!
- Favorite network programs that can't be heard in many areas on ordinary radios!

Actually 10 times more sensitive than the average of 16 other FM makes we have tested, Zenith's new Super-Sensitive FM literally "reaches" for distance! Brings you clear, static-free, fade-free reception where many other FM sets fail—and where interference and cross-talk spoil reception with ordinary radios. These are the most powerful, beautiful and value-packed radios Zenith* has *ever* produced. See and hear the proof at your Zenith dealer's—today!



The New Zenith "Major"

The most sensitive FM radio ever built for the public! New Super-Sensitive FM works even where many AM or ordinary FM sets are practically useless! Dial-Speaker. Big set tone quality, smart walnut plastic cabinet. AC, DC. Only **$39.95***



The New Zenith "Super-Triumph"

With new Super-Sensitive FM plus Long-Distance AM. Built-in FM/AM antennas. Flexo-Grip handle. Extra-quality Alnico "5" Speaker for maximum fidelity. Rich swirl walnut plastic cabinet. AC, DC. Only **$59.95***

*Prices subject to change without notice. West Coast and Far South prices slightly higher on "Super-Triumph."

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YES, put this practical farm tool to work for you . . . let it show you your exact costs, income, profits and losses on the different divisions of your farming operations. Know how much each animal or acre of cropland is costing you! Where you can save money on income tax! Or if you could make more profit by borrowing funds from the bank . . . by investing in labor-saving machinery . . . or by cutting down on some crop!

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Please tell me the name and address of the nearest store where I can get a free demonstration of the Smith-Corona Adding Machine.

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If you've thought of remodeling . . .

[*From page 39*]

around in your mind for a while and see what answers you come up with. If you answer "No" to any of these questions, you had better give up the remodeling idea and build new.

Roy and Verna Joslin answered each of the three with an unqualified "Yes," but it took a lot of time and planning. Answering the first question was probably the easiest. Roy went over the house from top to bottom. He realized that if there were decayed sills, studs, or joists, these parts would have to be replaced. Also, if the walls weren't plumb or if the roof were distorted, it was a safe bet that the structure was basically weak due to poor materials or faulty construction.

After giving the house a thorough going over, Roy decided he could truthfully answer "Yes" to the first question—that is, if a few sections of the sills and the lower ends of studs were replaced.

The second question wasn't so easy to answer. What changes in room arrangement would be possible? Could certain partitions be removed? Would the old, southeast bedroom be too narrow for Verna's dream of a modern kitchen? If they changed the old bedroom to a kitchen, could there still be a downstairs bedroom for Grandfather Joslin? How could Kenneth (a senior in high school) and his crowd get to the basement playroom easily? Could he have a bedroom of his own? Could there be a place for Roy's desk and files which he could reach easily from the rear entrance?

These and many more such questions popped up—and led to rough sketching on paper. Roy and Verna realized they must have exact measurements of existing walls, so they began drawing plans on squared paper. Soon various plans began to seem possible. They had to visualize as they planned and mentally go through the routine of daily work and living in the remodeled house.

While interior changes were being planned, the exterior of the house had to be considered. Detailed plans showing how the house would look from the outside were drawn by C. H. Van Vlack of Iowa State College. From the plans it was possible to get the effect of the location of windows and doors. In some cases, it was necessary to decide which was most important to the family, the outside appearance of the house itself or the inside convenience.

At last, a workable plan was drawn up. The remodeled house would be completely modern inside with emphasis on laborsaving and storage. (Mrs. Joslin called on Miss Naomi Shank, specialist in home management at Iowa State College, for help in planning the interior of the home.) The exterior would be modernized by using wide siding and adding a new front entryway and a breezeway on the east connecting the house and garage.

One more question to go and the Joslins could begin building: What would be the cost? Here, Roy and Verna figured long and carefully. They could not start remodeling without being sure that it could be done at much less cost than building a new home. They realized that remodeling should conserve at least 50 percent of the original value of the old house.

Totaling their cost estimates, Roy and Verna decided it would be cheaper to remodel than to build a new home of the same size. And they needed a sizable home! Bob and Jean, both married, visit frequently. It would be necessary to provide accommodations for the help needed to run the farm.

So the remodeling got under way—with Roy doing as much of the work himself as time would permit. First, a full basement was dug and new tile walls and partitions were built. Then, a smooth concrete floor with ample drains was poured. The basement now has a furnace and fuel room, fruit and vegetable storage, laundry, shower and toilet, and a large recreation room.

Both Roy and Verna felt that the stairs leading to the basement should be near the back door. They realized, too, that a grade entrance is often the real and only solution to a "basement stairs" problem. Through careful planning and sketching of headroom possibilities, such a combination was worked out. The grade-level entrance is now saving many steps, both on the level and up and down.

The breezeway connecting the garage and house was built with a flat roof. A door at the end of the upstairs hall leads out onto this flat roof; Mrs. Joslin uses this area for airing woolens and rugs.

[*Turn to page 126*

Hog raising is big business at the Joslins. Their hog house was featured in the June, 1949, issue of Successful Farming magazine

Remodeling nears completion as Roy Joslin and son Bob install a heating flue. Architect C. H. Van Vlack supervises the job

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Remodeling

[*From page 124*]

Roy and Verna studied floor arrangements for a long time before they actually started to remodel. They decided that it would be possible to have a more convenient arrangement by changing the use of some of the rooms. A downstairs bedroom was just the place where Verna wanted her new kitchen. And the old kitchen and pantry seemed a good place for a bedroom and bath off the rear hall.

The Joslins' remodeling centered around three major changes in their home, *Successful Farming's* Big Three for remodeled or new homes: 1. An entrance on the driveway; 2. a workroom; 3. a workable system of getting from one room to another.

The Joslins worked out the room arrangement problem by using small cutouts of furniture, bathroom fixtures, partitions, and stairs. These they moved over a scale drawing. In this manner they discovered which rooms should be left as is and which could be changed.

The upstairs was remodeled next. A second-floor bathroom was put in which can be reached easily from all bedrooms. Closets were built in each bedroom. Verna wanted a centrally located linen closet, a cedar closet for winter bedding, another cedar closet for winter clothing, and a storeroom for luggage and out-of-season bulky items. These storage spaces open off the upstairs hall. Verna also wanted a clothes chute, and that too was worked into their plan.

The first floor of the old house was completely changed. (See floor plan.) The dining-room alcove now is the favorite spot of Grandfather Joslin. Here he can sit in the sun and keep an eye on the farmyard. It's his favorite spot to baby-sit, too, when one of his great-grandchildren comes to visit. The space on each side of the alcove was used for two corner cupboards which are ideal for dish storage.

Probably the most noticeable change—at least as far as Verna is concerned—is in the new location and remodeling of the kitchen. Today, in her U-shape kitchen, it's only a step or two to get from one job to another.

The kitchen is tailor-made for Mrs. Joslin. Three different work-surface levels have taken the back strain out of cooking: Careful measurements were made so that the bottom of the sink and the mixing counter next to the refrigerator are just the right working height. The counter top to the left of the range and on either side of the sink are higher than the counter top to the right of the range. Mrs. Joslin does a lot of meal preparing here at her pull-out lapboard. All the counter tops are plastic except for a laminated-maple chopping board.

To Roy and Verna, remodeling seemed like an endless process, but at last the day arrived when they had the house to themselves. No more carpenters, plumbers, plasterers, or painters. And what a changed house it is. Everything Roy and Verna wanted in a home is there.

The first time the family gathered around the fireplace in the new living room was an occasion to be remembered. Comfort, convenience, and beauty in the home hasn't necessarily made the Joslins better farmers, but it has made them happier ones. **END**

Answers to farm quizbox

[*From page 68*]

1. (c) is correct. Artificial half heart, developed at Yale, makes possible the surgical repair of some heart defects.

2. (b) is correct. Grudge carrying is bad for health.

3. (b) is correct. While obstetricians limit Caesarean births to three or four, seven have been performed successfully on one woman, reports *Hygeia*.

4. (a) is correct. Mr. G. Huber, Oregon State College, is our authority.

5. (a) is correct. At least one expert, Dr. Omer C. Stewart, University of Colorado, blames the Indians.

6. (b) is correct. Eleanor Roosevelt writes that it was Molotov.

7. (b) is correct. Dr. S. Stevenson recommends in the *New York Times* that women eat balanced diets so more of them can breast-feed babies.

8. (a) is correct. Reducing can bring relief from pain in feet and ankles according to *Hygeia Magazine*.

9. (b) is correct. Just superstitious.

10. (c) is correct. A friend managed to squeeze 65 inches of tooth paste out of a 2¼-ounce tube in a test for this column.

11. (c) is correct. Woodrow Wilson brought his bicycle to the White House.

12. (a) is correct. ACTH is still extremely scarce, reports *Time Magazine*.

13. (a) is correct. Chinese chestnut will replace blight-stricken American one.

14. (b) is correct. Pressure on nerve trunk finally causes blood supply to be cut off from nerve at point of pressure.

15. (a) is correct. Tooth excavation is done by fine abrasive powder carried in stream of carbon dioxide gas.

16. (c) is correct. White House cornerstone, with plate inscribed October 13, 1792, was found by mine detector.

17. (a) is correct. First mechanical clock was built in 990 A.D.

18. (c) is correct. Deep-sea diving record set in benthoscope.

19. (c) is correct. 102,000,000 motor vehicles have been produced since 1900, according to car manufacturers.

20. (c) is correct. Try it. END

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April garden tips

April, pride of spring, is here again. Such fine weather gives us new energy for this year's tasks. The soil is warming up, and there are new signs of plant life all about us. Which reminds me: There's a lot of work to be done in the vegetable garden, in the flower borders, and around the lawn.

In the vegetable garden. In preparing to plant fall-plowed gardens, or if you're getting ready to plow them this spring, remember not to work the ground when it is too wet. You'd regret that all summer long.

Spring gardens are our best and most productive gardens, so make the best of them. Prepare the seedbed carefully. Make use of fertilizer. Last but not least, make succession plantings to get vegetables such as lettuce, radishes, spinach, and onions at their best eating stage. To do this, plant these crops at 10- to 14-day intervals.

Above all, don't do as some gardeners do—plant a whole packet of lettuce seed and expect it to provide your family with good lettuce *all* spring and summer.

If you have difficulty finding the rows of parsnips, beets, carrots, and salsify when you get ready to cultivate the first time, try mixing a few radish seeds with these slow-to-grow vegetables. The young radishes pop up in a hurry to mark the rows for these first cultivations. And, of course, this planting gives you more radishes to eat.

If you started tomato, pepper, eggplant, or sweet potato plants in March, they still need careful attention. As soon as the tomato plants show their first true leaves (about 3 weeks after planting), transplant them into flats, spacing plants about 3″ apart. If individual containers are available, use them. Also transplant peppers when they show their first true leaves (usually about 5 weeks after seeding). As sweet potatoes are transplanted directly to the garden, the seed should not be started until about 6 weeks before they go to the garden.

Have you ever tried growing some of your tomatoes by direct seeding in the garden where they are to grow? If not, try four or five hills this year. To do this, prepare a fine seedbed as you would for lettuce seed. Plant a half-dozen tomato seeds in the spot where you will want the permanent tomato plant. After they are 2 inches tall, remove all but the best plant in each hill. Transplant these extra plants to permanent places.

For central Missouri and southern Illinois, this direct seeding may be done about April 20. In other states, this seeding may be done 15 to 20 days before the recommended date for setting out tomatoes in your particular area. If this direct seeding fails, you still can buy plants to set out.

Give a side-dressing of complete commercial fertilizer to cabbage plants 2

weeks after planting in the ground. Use 1 tablespoon of 10-6-4 or 4-12-4 fertilizer per plant. Apply it in a band around each plant.

As soon as you can work the soil, set out your asparagus and rhubarb plants. Do not harvest from these new plantings the first year; give them time to become well established.

Among the flowers. Are you using pussy willow bouquets this spring? Maybe you would like a plant of your own. With care, these twigs can be rooted, then transplanted to the garden. Keep them in about 5 inches of water in a cool place until about 4 weeks before tomato-planting time. Then plant them in the garden. I have seen as many as 50 percent take root and grow in this manner.

One to two weeks before tomato-planting time is the time to sow annuals. Some of these early-planted kinds include cosmos, petunia, cornflower, the annual larkspur, snapdragon, and portulaca. Plant them where they are to grow. In preparing the seedbed, rake into the soil a heaping teaspoon of commercial fertilizer to each square foot of flower bed.

If you get an Easter lily this year, check to see whether it is a Croft or Estate. If it's either one of these, you can save the plant. As soon as it finishes blooming, remove the plant from the pot and plunge it into the flower border. It may even bloom again this summer. These two kinds are winter-hardy and may be treated the same as other hardy lilies. However, if yours is one of the Japanese Easter lilies, the plant isn't hardy and cannot be brought through the winter months outdoors.

Around the lawn. As soon as the ground can be worked, plant those trees and shrubs you ordered in February. Dig the holes large enough to accommodate the full root system without cramping it. Set them at the same depth as they were in the nursery.

When setting evergreens, be sure to plant them no deeper than they were in the nursery. To plant, untie the string around the trunk and roll the burlap down halfway on the ball of soil. Soak them thoroughly right after planting and again every 2 or 3 weeks during the growing season.

Prune established evergreens this month; but play safe and don't prune beyond last year's growth.

Forsythia should come in for its annual pruning as soon as the bloom period is over. Remove the oldest wood completely back to the ground and head back some of last season's more succulent growth.

A regular fertilizing program for your lawn produces wonders, and April isn't too late to make a good application. If your farm is one having a good supply of stable manure (cow manure is best), use it as the fertilizer. Be sure the manure you use is well rotted and relatively free of straw and weeds. Apply about 25 pounds of it per 10x10-foot area. It is very important to spread it evenly and well.

If you do not have manure available, apply commercial fertilizer. Apply ammonium nitrate at 3 pounds per 20x50-foot area or ammonium sulfate at 5 pounds per 20x50-foot area. If neither of these is available, an application of 10-6-4 will do nicely.—*A. E. Cott, Iowa State College Extension Horticulturist.*

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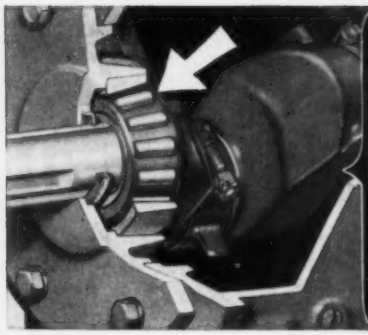

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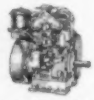

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[*From page 45*]

minerals, and certain APF concentrates produced by microbial fermentation will help prevent scours.

Scouring pigs have poor appetites. Even if on pasture, they won't eat enough green feed to get enough B-vitamins. This calls for a special built-up ration or a trip by a veterinarian. He can inject B-vitamins into the pigs to give them an appetite.

Some farmers give extra vitamins through the mouth with an oilcan. It seems to do the job for Donald and Ed Lee of West Liberty, Iowa. They give a mixture of liver extract, B-vitamins, and Vitamins A and D oil, and believe that it's the only way to keep down scours. Last spring, they dosed the bad ones every day and other pigs that weren't scouring, every other day.

Experiments with weaned pigs at the Iowa station indicate the part B-vitamins, trace minerals, and APF may play in preventing scours. In 13 lots of pigs, those fed rations fortified with these nutrients did not scour, while considerable scouring occurred in all lots fed the regular ration. This difference showed up in pasture lots as well as in dry lot.

Max Bailey of Story County, Iowa, thinks that a specially fortified ration even will help pigs snap out of certain kinds of scours. Last fall, he had about 175 pigs, and 25 to 50 percent of them developed scours. He got busy and called on the swine specialists at Iowa State College for help. They fixed a special ration for his pigs. He had his local feed manufacturer make it up. This special ration was highly fortified with B-vitamins, trace minerals, and APF. The pigs quit scouring and began putting on good gains again. Scouring had practically stopped six days after he started feeding the special ration.

A special sow-and-pig supplement is needed during the suckling period. As the amount of feed eaten by nursing pigs is relatively small, this sow-and-pig supplement should be made with a "safety factor" to avoid any possible chance of a nutritional deficiency. It's important that enough APF and B-complex vitamins, such as riboflavin, niacin, and pantothenic acid, are in the supplement.

When the supplement has enough natural B-complex vitamin carriers, such as alfalfa meal, fish solubles, and dried corn distillers' solubles, they tend to cut the protein content. These supplements, which may run as low as 30 percent protein, have been criticized by many. But remember that the protein content alone is not a good measuring stick of the value. Always consider its vitamin and mineral content as well. Many swine nutritionists believe that a 30-percent protein supplement will do a better job in the dry lot than a 40-percent.

Here's an example of an excellent 18- to 20-percent protein sow-and-pig ration to be self-fed with shelled corn: 750 pounds ground yellow corn, 500 pounds rolled or ground hulled oats, 200 pounds wheat flour middlings, 100 pounds meat and bone scraps, 200 pounds soybean oil meal, 100 pounds cottonseed meal, 50 pounds linseed oil meal, 50 pounds dehydrated alfalfa meal, 0.5 pound Vitamin D_2 carrying 4 million units per

pound, 3 grams riboflavin, 20 grams niacin, 10 grams pantothenic acid, 4 to 10 pounds APF (a level of 0.2 to 0.5 percent), 30 pounds ground limestone, 20 pounds steamed bonemeal, 10 pounds iodized salt, 2 to 4 pounds trace minerals.

This formula may look complicated but, remember, so are your feeding problems these days. The ration may be self-fed to sows and pigs, or fed to pigs in a creep.

Get sows and pigs to pasture as soon as weather permits. Pasture feeding covers up many dry lot feeding sins, and can save 25 to 50 percent of the protein supplement and about 5 percent of the grain needed to produce pork.

But here's a word to the wise when figuring the value of pasture: Some folks get a bit careless when they say that their "hogs are on pasture." There are all kinds of pasture—from very poor, dried-up bluegrass to excellent, succulent alfalfa. It takes *good* pasture.

Many farmers have been turning to the use of concrete lots to overcome diseases, parasites, water hauling, and fencing problems. This definitely creates nutritional deficiencies—new experiences for many good hog feeders if they continue to feed the ration which did the job on pasture. And most of these deficiencies show up in dry lot feeding during the critical period up to 75 pounds.

Another "must" to get pigs off to a good start and to keep them hustling along to an early market is to start them eating early. Early gains are the cheapest gains. Pigs that grow the fastest right from the start are the ones that make the most money.

Little pigs will begin eating grain when they are 10 days old. A small pen or creep which allows the pigs to enter but keeps out the sows is a practical way of getting this job done.

If some runts develop in your herd, the experience of the farmer we mentioned earlier may suggest a way to straighten them out. He started self-feeding the batch of runts corn and a manufactured supplement adequate—for normal pigs—in APF, B-vitamins, and trace minerals. In six weeks, the number of runts had been reduced to less than a third of the original number.

This supplement was not a special "souped-up" feed. It was the same one sold generally by this feed concern, and it straightened out two-thirds of the runts or the so-called marginal runts.

The remaining runts were moved onto concrete and fed a special pig booster in which the APF was tripled, and dried whey added to supply some whey factor. This pig booster also was more highly fortified with pantothenic acid, riboflavin, niacin, and choline.

These runts had made some recovery on the regular supplement. But immediately after they got the special pig booster, the big change came. The owner saved all but 2.5 percent of a large batch of runts. He estimates that only a third of them would have lived had they not been switched to the better ration.

Another new theory in hog feeding is being proposed by nutritionists. It's this business of "disease level" on the farm and how it affects the rations you should feed. They contend that the strength of the ration you need to feed depends on what degree your fields, lots, and buildings are contaminated with disease.

[*Turn to page 132*

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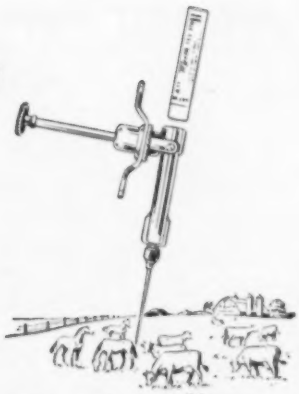

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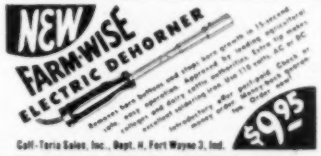

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PFISTER ASSOCIATED GROWERS, INC.
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Feed best to 75 pounds

[*From page 131*]

To give you an idea of what kind of a ration may fit the disease level on your farm, let's illustrate with a couple of examples—Farmer A and Farmer B.

Farmer A is raising pigs in lots and permanent pasture where pigs have ranged for the past 10 years. Each year, he has experienced more and more trouble from scours, necro, erysipelas, bullnose, and unidentified pig ailments coming under the general classification of so-called "baby pig diseases." He is a renter. The farm isn't fenced hog-tight. And Farmer A isn't in a position to apply the clean-ground system.

So Farmer A should feed a ration something like this: 300 pounds meat and bone scraps, 700 pounds soybean meal, 100 pounds cottonseed meal, 100 pounds linseed meal, 300 pounds wheat flour middlings, 100 pounds wheat bran, 100 pounds dried corn distillers' solubles, 200 pounds dehydrated alfalfa meal, 1 pound Vitamin D_2 carrying 4 million units per pound, 10 grams riboflavin, 30 grams pantothenic acid, 40 grams niacin, 10 to 30 pounds APF concentrate, 60 pounds ground limestone, 40 pounds steamed bonemeal, 40 pounds iodized salt, and 5 to 10 pounds trace minerals.

The riboflavin, pantothenic acid, and niacin should first be premixed by dissolving in a quart of water and then thoroughly mixed with 10 pounds of soybean oil meal. Follow the manufacturer's directions on the APF and trace minerals. If the distillers' solubles are not available, use alfalfa meal.

The above ration is for feeding through gestation, lactation, and up to 75 pounds either in dry lot or on pasture. Self-feed the mixture with corn.

In contrast, Farmer B follows the clean-ground system. Pigs are on good alfalfa pasture as soon as weather permits. He shifts his dry lots, seldom has disease.

Under this low disease level, Farmer B can do an excellent job on pasture with this less expensive ration self-fed with corn: 300 pounds meat and bone scraps, 1,250 pounds soybean meal, 100 pounds cottonseed meal, 100 pounds linseed meal, 100 pounds alfalfa meal, 10 to 30 pounds APF concentrate, 80 pounds ground limestone, 50 pounds steamed bonemeal, and 40 pounds iodized salt.

In the dry lot, Farmer B should modify the above mixture by adding a pound of Vitamin D_2 carrying 4 million units per pound and 5 to 10 pounds trace minerals, and by replacing 200 pounds of soybean meal with 200 pounds alfalfa meal.

The more highly fortified ration for Farmer A is stepped up mainly in its content of B-vitamins and trace minerals. Farmer B may be able to do a fairly good job even with a less complex ration, but this one will give him the best results.

If the farmer finds it impossible to get such rations mixed, he may prefer to purchase manufactured supplements of similar quality.

Of course, feeding won't do the whole job. Prevention of diseases and parasites through good sanitation is necessary.

The best recommendation that can be given a farmer is to seek intelligent advice from a good veterinarian on disease problems. Your state agricultural college will be glad to help you on feeding and management problems. **END**

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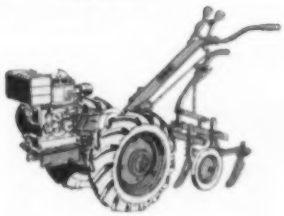

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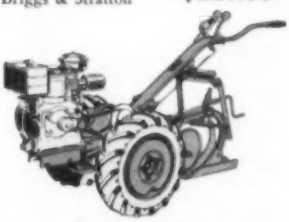

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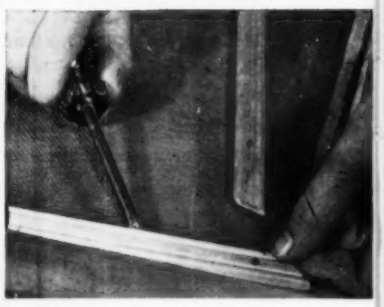
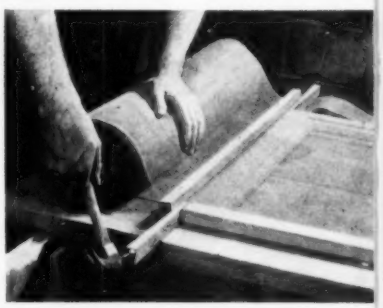
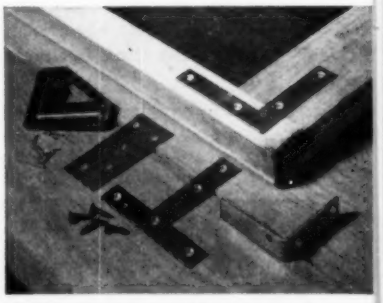
Ideas for screen repair



1. When replacing an old screen, pry loose the strips of molding with your screwdriver or chisel. Be careful not to break the thin strips. Remove the old screen from the frame and pull out all of the remaining screen tacks



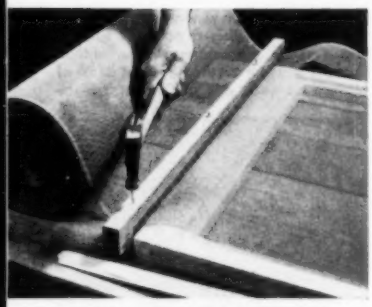
2. To stretch new screening tight, use wood wedges, driving them into the space between the end of the frame and the clamping sticks. Then tack screen to the end of the frame and cut it to fit exactly into place



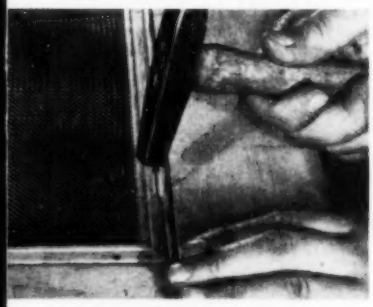
Mending irons of many shapes are available to repair screen frames that are broken at the corners. Second from left is a home-made plate, cut from heavy-gauge sheet metal. Screw the irons to the corners tightly

No matter who does it, the screen repair job is an easy one if the system described here is followed

By Elma Waltner



2. Nail a strip of board to the workbench. Place the end of the screen frame next to the strip and tack the new screening to the opposite end. Roll the screen over the frame and clamp with another strip of board



4. The next step is tacking the screening to the sides of the frame. Start tacking in the middle and work toward the ends of the frame; then tack the screening to the middle rail. Renail the molding with light brads

Sagging screen door can be pulled back into position by using a turnbuckle brace. Install the brace as shown, then tighten the center buckle until the door swings easily

[*Turn to page 136*

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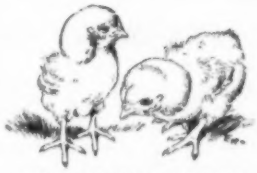

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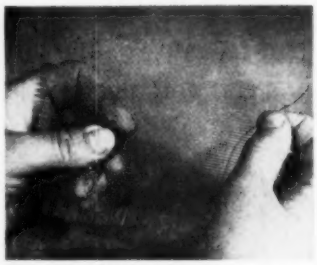
Ideas for screen repair

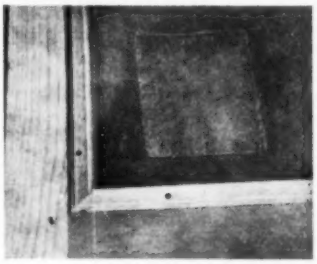
[*From page 135*]



1. A small hole in a window screen may be repaired by applying a patch of window screen mesh. Cut a square patch larger than the hole and pull out the wires to a depth of ½ inch on each side of the patch piece

2. Use a straight-edge ruler or a plastic triangle and lay it flat on the screen patch as shown here. Bend the piece of screen up until you have made a 90-degree angle with the fringed edge. Bend each edge like this

3. Leave every sixth wire as is, and bend the rest back against the screen patch. The remaining wires will hold the patch in place and make it easier to apply. Use new screening for the patch, so wires won't break



4. Place the patch over the hole and push the wires through the screen. Hold the patch in place and turn the frame over; then bend down the wires against the screen. If wires stick up, bend them back into screen. **END**

News

Top-dress wheat if fertility is low

Spring top-dressing with nitrogen may pay on wheat, according to six experiments on New York farms in 1948. Applications of 15, 30, and 45 pounds of nitrogen to the acre were tried.

On soils naturally low in fertility or where the soil nitrogen was unavailable because of high moisture in the soil, the addition of 15 or 30 pounds of nitrogen produced an increase in yield of about 6 bushels an acre.

On soils naturally high in fertility, the additional nitrogen caused greater lodging, a reduction in yield and, probably, injury to the hay seeding.

Further tests are planned to more carefully define the places where nitrogen top-dressing will pay. In the meantime, Cornell agronomists say applications up to 30 pounds an acre can be recommended for soils low in fertility, where lodging is unlikely.—*James S. Knapp.*

How thick is your corn?

Results of 1948 experiments on rate of planting corn confirm results obtained in tests in 1946 and 1947 by Cornell University scientists.

Based on work on 20 farms in New York State, a spacing of about 9 inches between plants in 36-inch rows produced the highest yield. This is equal to a spacing of about 8 inches in 42-inch rows.

In the tests, even closer spacings gave higher yields under the best corn-growing conditions. Therefore, the recommendation is to plant thick enough to give a good yield every year and close to the maximum possible in good years.

Because nearly one-fourth of the live seeds planted fail to produce a good, strong plant in the field, it is necessary to drop a kernel about every 7 inches to get plants 9 inches apart.—*James S. Knapp.*

Wilted silage is tops!

Wilted silage—alfalfa hay exposed to the sun from 4 to 6 hours—is slightly superior to either barn-cured or field-cured hay when given as the only roughage to growing dairy calves. They not only put on weight somewhat faster, but young animals eating wilted silage were sleeker and had a better appearance.

The feeding trials extended over a 2-year period, and dairy husbandmen at the Beltsville, Maryland, research farm of the Bureau of Dairy Industry, U.S. Department of Agriculture, are sure that the wilted silage had enough Vitamin D to stave off rickets. That is, if the hay exposed to only 4 to 6 hours of sunlight was fed to the calves at a rate of 1.2 to 1.7 pounds per 100 pounds of body weight.

Barn-cured hay had to be given at the same ratio, to prevent rickets, and yet the calves given wilted silage made an average daily gain of 1.71 pounds, over a 180-day period, compared to 1.65 pounds daily gain for young dairy animals fed barn-cured hay.—*S. R. Winters.*

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*ABOVE: Comparative yield from two 250-foot rows—nubbins on left did not have benefit of inoculated cover crop.

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*Name of farmer on request

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Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 75. Visit the store nearest you for help with your decorating problems.

"Wellworth" Sensational Offer! Reg. $60.50
WESTINGHOUSE AIR COMPRESSOR
$21.50 Compressor Separately

Model T-1 Brand New — 2 CYLINDER PISTON TYPE. Operates with ½ H. P. Motor or equivalent gas engine.

Compressor, pressure tank, air gauge, air chuck, 20-ft. hose, pop valve, copper tubing with 4 brass flared fittings for connecting compressor to tank, 4-way cross and 3 nipples. COMPLETE OUTFIT, wt. 52 lbs. $32.50

Equipment less Compressor, $12.50

Compressor has 2" bore, 1½" stroke, ball bearing, 3.27 CFM at 600 R.P.M. Capacity up to 6.54 CFM. Size 9" x 11¾" x 6⅝". Wt. 58 lbs. Ideal for spraying paints, insecticides, etc., inflating tires, operating air tools, and other uses. All new equipment. U. S. government surplus. Replacement parts available. Amazing buy. Don't miss it.

Prices f.o.b. Chicago. Sold on money back guarantee.

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Motor guide, air compressors, home and factory workshop tool catalog. Send 10¢ to cover postage and handling, deductible from first purchase.

You'll enjoy a healthier, happier dog—and so easily—with safe, fast-acting Sergeant's Dog Care Products to help you keep him in fettle. There's one for almost every canine complaint—worms, poor condition, ticks, fleas, itching, ear trouble—and grooming, too. Certified by consulting veterinarians. Depended on for 75 years. At drug or pet store. **FREE:** Sergeant's Dog Book, treasured for its sound advice on what to feed, how to train and care for your dog. At drug or pet store—or write Sergeant's, Richmond 20, Virginia.

Sergeant's* dog care products

* ® Polk Miller Products Corp.

For friendly help with your building, furnishing or decorating problems, visit the store nearest you offering **Successful Farming's** home planning service. Stores are listed on page 75.

Whether you are planning to build a new home, add an extra room, modernize your water system, or insulate your ceilings and walls, Successful Farming's Building Book helps you do the job right and save money and time in the bargain. See page 198.

LIVESTOCK HEALTH *and* LIVESTOCK PROFITS GO HAND IN HAND

Unhealthy livestock means an *unprofitable* stock program.

LET ANCHOR SHOW YOU THE WAY

For more than a third of a century, The Anchor Serum Company has been showing farmers and stockmen the way to increased livestock profits through healthy herds and flocks. Anchor can help you get the most from your livestock investment.

DON'T WAIT FOR DISEASE TO STRIKE

Simple ANCHOR instructions enable you to do a first class vaccinating job on your own stock. Full doses of good, fresh serum and virus, produced and tested under U. S. Government supervision, are your assurance of best results. *And you make a big saving when you do the job.*

THERE'S AN ANCHOR DEALER NEAR YOU . . .

WRITE TODAY FOR YOUR FREE COPY OF "VACCINATION SIMPLIFIED."

ANCHOR SERUM CO.
"World's Largest Serum Plant"
South Saint Joseph, Missouri

SOOTHING ANTISEPTIC RELIEF

8 OZ. TIN 60¢

For Sore Teats Congestion, Cuts and Bruises

Dr. Naylor's Udder Balm combines the bacteriostatic action of Oxyquinolin with the softening and absorbing action of Lanolin and Essential Oils. A fast, effective ointment for udder and teats—to reduce congestion, danger of external infection and promote clean, rapid healing. Mailed postpaid if your dealer cannot supply.

H. W. NAYLOR CO. • MORRIS 7, N.Y.

Another Dependable Dr. Naylor Product

How to beat the borer

[*From page 50*]

supplies without orders. Some companies *did* produce extra supplies and everyone was happy to get them.

If you buy early as insurance, have no fears. DDT from any reliable manufacturer will keep over for next year or, of course, it can be used for other insect control if the borers don't seem to be very warlike.

But don't forget these three cultural control tricks: (1) plow your fields clean, and clean up fence rows where the borers can hide; (2) avoid excessively early and late planting; (3) plant resistant or tolerant varieties of corn.

The big hitch is, no matter how well you turn under all your stalks and clean up the fence rows so no borers can hide, it doesn't solve your problem unless your neighbors do the same. The pesky borers will fly over the fence to visit you, and you're in trouble. Best idea is to kill all you can at home, and try flattery, bribery, or desperate appeal to get your neighbors to do the same.

Even then, there are apt to be a troublesome number of borers around at the wrong time. Then your question is: Will it pay to spray? If you decide it would—just when is the best time?

If you face the prospect of spraying or dusting 40 to 400 acres of corn and find the thought of it makes you jittery, you can take heart from the experience of a group of farmers near El Paso, Illinois. After three or four years of experience,

> **Though we travel the world over to find the beautiful, we must carry it with us or we find it not.**
> —*Ralph Waldo Emerson*

they take their spraying in stride. To them it's as much a part of farming as plowing. They watch the borer closely, spray if and when necessary. Some declare they would spray even if corn dropped to 50 cents a bushel.

Or you can get encouragement from the experience of a number of Illinois farmers who cooperated in large-scale field tests with Entomologist H. B. Petty. Each treated most of his corn acreage but left a check strip untreated in each field so that he could measure the actual benefits of treatment.

Petty's tests covered three years. He kept records—on both treated and untreated parts of each field—of the percentage of stalks infested, the average number of borers per 100 stalks, the yield of sound and unsound ears.

The tests revealed that *each borer per stalk* decreased the yield 4.7 percent in 1947, 2.73 percent in 1948, and 5.13 percent in 1949.

W. E. Jacobsen of Pottawattamie County, Iowa, treated one small field, leaving a check strip untreated. He found the treated area yielded 123 bushels per acre, compared with 100 bushels per acre in the check. The yield was figured on shelled corn converted to 15.5-percent moisture, thus eliminating variations in cob.

First-brood treatment on the Leo Sorenson farm in Emmet County, Iowa, showed yields of 70 bushels in the treated

area and 53 bushels in the untreated. That's a 17-bushel increase per acre.

An increase of 3 bushels per acre will pay for the cost of treating your fields for borer control.

Last October, a demonstration on the George Ruth farm near Marshalltown, Iowa, showed the results of DDT application for corn borer control. Ground spray showed off the best, with airplane spray a close second.

A yield of 102.4 bushels per acre was obtained on plots given two first-brood control applications of 1½ pounds actual DDT per acre, applied as a ground spray. That's 19.2 bushels per acre increase over the untreated check, which yielded 83.2 bushels.

Plots receiving two aerial applications of 1½ pounds of actual DDT per acre yielded 100.7, an increase of 17.5 bushels over the check. The ground spray killed 96.4 percent of the corn borers, and the aerial spray killed 70.5 percent of the borers.

That's what happened to some folks' yields last year. How about *your* yields *this* year? Here are the questions you'll have to answer:

Should you use an insecticide? That depends on number of borers, weather, and size of corn at borer-hatching time. In mid-June, begin looking on the undersides of leaves for small, white egg masses, about a quarter-inch across. Watch them closely until they begin to hatch. Count the egg masses on 100 corn plants.

A fairly safe rule: If, at hatching time, you find 50 or more egg masses on 100 plants, and the plants (leaves extended) are about 35 inches tall, prepare to treat. If the corn is much shorter, survival of young borers may be so small that treatment might be wasted. Wait for 10 to 14 days after the first eggs have hatched. Then spray or dust, if you decide that's necessary.

Best of the insecticides now available is DDT. After five years of experience and observations involving thousands of acres, entomologists recommend application at the rate of 1½ pounds actual DDT per acre.

How to treat? Whether to spray or dust, to use ground equipment or planes depends upon your individual setup. Entomologists of the Illinois Natural History Survey have found spraying with ground equipment is most effective, followed in order by dusting with ground equipment, spraying by airplane, and dusting by airplane.

[*Turn to page 140*

SUCCESSFUL FARMING

ONE STANDS OUT

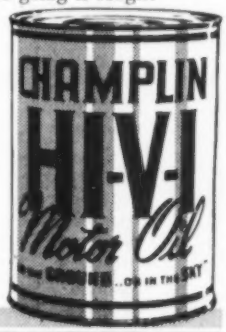
In 6 years of farm club work, Virginia has made 26 talks and given 7 demonstrations of her work. Winner of 75 blue ribbons in local competition, 60 in the county and 3 on State Fair exhibits, she is a blue-ribbon style show girl in Black Hawk County, Iowa. An expert at baking and sewing, her favorite project is refinishing antique furniture. The table in the picture is over 100 years old. In addition to all of this activity, Virginia carried a livestock project for two years.

Among Motor Oils

It's CHAMPLIN HI-V-I!

HI-V-I is the oil for spring! It's got the power to penetrate for instant, uniform lubrication, during changeable spring temperatures. Extra-rich . . . extra-tough . . . HI-V-I stands up when the going is rough!

There's a big job ahead for farm machinery and HI-V-I helps do it, with less wear on engines! Greater resistance to high speeds, pressure and temperatures makes HI-V-I the safest motor oil for spring and summer use! HI-V-I is refined from premium Mid-Continent crude oil . . . 100% pure!



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CHAMPLIN REFINING COMPANY
Enid, Oklahoma
Producers, Refiners, Distributors
of Quality Petroleum Products
Since 1916

You can rely on the advertising in Successful Farming. It has received our guarantee. Read this guarantee on the index page.

For friendly help with your building, furnishing or decorating problems, visit the store nearest you offering **Successful Farming's** home planning service. Stores are listed on page 75.

Corns?

Fastest Removing Action Known To Medical Science!

NOW! FASTEST RELIEF

The instant you apply Dr. Scholl's Zino-pads, painful shoe friction stops, pressure is lifted. And no corn-removing action known to Medical Science is faster than Dr. Scholl's. Get a box today! At Drug, Shoe, and Dept. Stores.

Dr Scholl's Zino-pads

METAL REPAIRS MADE EASY WITH

Kester Solder

SEND FOR NEW FREE Soldering Booklet

KESTER SOLDER COMPANY
4250 Wrightwood Ave., Chicago 39, Ill.

JOHN DEERE No. 5 MOWER POPULATION

continues to grow

BY LEAPS AND BOUNDS

MANY thousands of satisfied owners are the big reasons why the John Deere No. 5 Mower population *continues to grow by leaps and bounds.* These owners have proved to their neighbors that the No. 5 is a much better buy—proved that it does better work . . . proved that it cuts mowing costs . . . proved that it lasts longer and costs less for upkeep.

The No. 5 is an easy-on, easy-off mower that works with any tractor—cuts from 25 to 35 acres per day. Its hinged hitch bar and caster wheel carriage insure flexibility for cleaner cutting, easier steering of the tractor, and square corners. This great flexibility also eliminates strain and twist on the frame when working over rough, gullied or rocky fields.

Cutting parts are of highest quality materials. Simple adjustments for maintaining proper lead in the cutter bar and for keeping the knife centered in the guards insure new mower performance down through the years.

The No. 5 carries two very valuable "insurance policies"—a quick-acting slip clutch on the power shaft to protect the knife against breakage due to clogging . . . and a simple break-away feature, which permits the entire mower to swing back out of danger should the cutter bar strike a field obstruction.

See your John Deere dealer for further information on the No. 5—*the mower that's been copied by many but equalled by none.*

MAIL THIS COUPON *Today*

JOHN DEERE

MOLINE, ILLINOIS

Please send me free folder on the No. 5 Mower.

NAME.....

TOWN.....

RFD.....STATE.....

JOHN DEERE QUALITY FARM EQUIPMENT

How to beat the borer

[*From page 139*]

Costs vary, usually, from about $1.50 per acre for ground applications by inexpensive, homemade spray equipment to $3.25 per acre for custom airplane dusting.

Hire the work done or do it yourself? You'll have to decide after looking over all possibilities. Reliable custom operators with good equipment may do the work better than you can do it yourself. On the other hand, you may not be able to hire a custom operator when you most need him, or occasionally the operator you hire may be inefficient. Investigate before you hire.

Do you have several uses for a sprayer? Gene Cleary of El Paso, Illinois, hired his corn spraying done for a couple of years. Then he decided he needed a sprayer for grasshopper control and for control of flies and lice on cattle. So last year he built a spray outfit for about $175 and did his own spraying for corn borer control.

How many treatments? For field corn, in most years, only one treatment is justified. But with heavy infestations—as those of 1949—a second treatment for the first generation might be good insurance. Also, with such infestations, a treatment for the second generation probably will more than pay for itself.

Second-brood control applications seemed to be most effective when put on in the early part of the egg-laying cycle. In general, the second brood is more numerous, causes more damage per borer, and is harder to control than the first brood. Second-brood damage usually is in the form of dropped ears and chaffy corn.

(Evidence throughout the Cornbelt shows first-brood borers cause short ears, chaffy ears, poor pollination, and poor ear filling. These first-brood robbers sap the strength of the entire plant, making it weak and short on nutrients.)

Second-brood egg-laying in August of last year was also extremely high. Counts in Iowa ranged from 300 to 2,500 masses per 100 plants. Entomologists recommend treatment for second-brood borers when there are 100 egg masses per 100 corn plants.

As expected, the second brood attacked late-planted corn and replantings. However, fields treated for first brood were so green and vigorous that some second-brood damage was done to early planted fields. Here, the added damage was mostly in dropped ears.

How to test results? The only sure way is to leave an untreated check of a dozen or more rows in each field, then at harvest time compare yields in the two parts of the field. Comparing a treated field with an untreated field proves nothing. Slight differences in soil fertility, hybrids, and date of planting may mean big differences in damage done by the borer, as many farmers in the Cornbelt discovered last year.

So, look to the weather to find out how big a population of borers the Cornbelt will have this year. But with an overwintering population that is almost three times as great as last year, 1950 may set another record. It's up to you how much of your corn they eat. **END**

Easy-to-build egg cooler

Heat and low humidity are two of the worst enemies of egg quality. Realizing this, Mr. and Mrs. Marvin Goodwin, Sedalia, Missouri, built an inexpensive, sandbox egg cooler in their basement.

The cooler is 3′x6′, with a 2″x6″ board frame. The box is filled with 4″ of sand. A slat top provides a place for setting the egg baskets and cases. Water is added to the sand daily. As the water evaporates, it has a cooling effect and keeps the humidity at a safe level. Dampened burlap curtains also help keep the box cool.

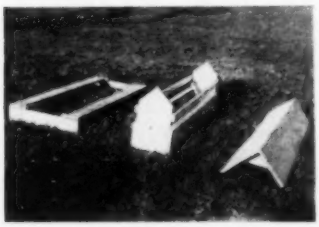
The increase in the quality of eggs has meant greater profits for the Goodwins. Goodwin reports that, "for the money invested, this easy-to-build egg cooler gives us the best return of anything on the farm."—*E. B. Winner.*

Laborsaving range feeder

Large range feeders will save you time and labor in caring for young birds on range. Combine the feeder pictured here with a 55-gallon water barrel and automatic float. These two units can really cut the time you spend caring for poultry!

The feeder will hold approximately 50 pounds of feed. It's built in three sections, making it easy to clean and move. The sections are: steps, center compartment, and cover. A lath tacked on each side of the feeder prevents "billing out" feed. Finished lumber for the feeder will cost about $5, but you can use secondhand lumber and old galvanized roofing and keep the cost much lower.

This feeder has proved popular with Missouri poultrymen. The Missouri County Extension Agents' report shows 3,053 feeders of this type were built during 1947.—*Norman Clizer.*



YEAR AFTER YEAR

Pittsburgh Paints

LOOK BETTER

...cost less in the long run

There's A Pittsburgh Paint For Every Farm Need

SUN-PROOF HOUSE PAINT—Will not darken or discolor from coal smoke or sulphurous gases because it's fume-proof. It is self-cleaning, too—removes surface dirt.

WALLHIDE WALL PAINT—Oil-base wall paint that covers with one coat. Beautiful colors available in flat, semi-gloss and gloss finishes.

FLORHIDE FLOOR ENAMEL—Quick-drying enamel for wood or cement floors or steps.

WATERSPAR ENAMEL—For furniture and wood or metal trim, inside and outside.

FARM folks need paints that protect their homes and service buildings a long time. That's why so many of them use Pittsburgh Paints—the finest their money can buy.

● Pittsburgh Paints are easier to apply and dry more quickly. The special *"Vitolized Oils"* which they contain keep them tough and elastic, provide long-lasting *live-paint protection.*

● These benefits are the result of Pittsburgh's way of making paint. Through 95 years Pittsburgh has developed many different ways of treating oils and materials and new ways of doing things that have improved performance and extended the life of Pittsburgh Paints so they cost less to use in the long run.

Free Booklet on COLOR DYNAMICS

● Ask your Pittsburgh dealer for a FREE copy of *"Color Dynamics* for Your Home." Or send coupon.

Pittsburgh Plate Glass Co., Paint Div.
Dept. SF-40, Pittsburgh 22, Pa.

Please send me a free copy of your new booklet, "COLOR DYNAMICS for Your Home."

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Street or R. F. D. _____

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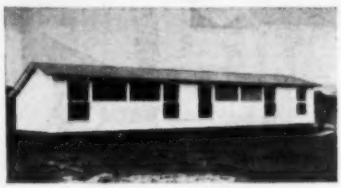
PITTSBURGH PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

"We've been using CEL-O-GLASS for 25 years"

"We expect to continue use of 'Cel-O-Glass' wherever a strong, light-weight window is needed," Mr. Bell adds. "We have not found other so-called glass substitutes as satisfactory as 'Cel-O-Glass'."



CEL-O-GLASS is used in a great number of colony shelters and brooder houses like this on the Bell Farm, as well as in laying houses which house some 2900 New Hampshire breeders. Mr. Bell has been an R.O.P. breeder for 19 years.

CEL-O-GLASS Gives You All These Advantages:

- **Special Du Pont plastic-coated wire mesh window material.**
- **Heavy galvanized steel mesh base.**
- **Quick and easy to install.**
- **Tough, durable, weatherproof.**
- **Can't shatter. Lasts for years.**
- **Attractive appearance.**
- **Helps keep houses warm and dry.**
- **Lets in ultra-violet rays.**

Many uses—*Quick and easy to install for long-life, sturdy windows in brooder houses, poultry houses, dairy barns, milk houses, hog barns, etc. Fine for porches, storm doors and windows, hot beds, plant protectors, other permanent and emergency uses. Keep a roll on hand—it takes little space—comes in 28- and 36-inch widths. The Du Pont Co., Organic Chemicals Dept., Wilmington 98, Delaware.*

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CEL-O-GLASS®

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Laughing at Life

Amazing!

A young mother came to the door of the nursery and noticed her husband standing over the baby's crib. Silently she watched him as he stood looking down at the sleeping infant. In his face she read wonder, doubt, and admiration. Deeply touched, she tiptoed to his side and put her arms around his neck.

"A penny for your thoughts, darling," she whispered. Startled into consciousness, he blurted: "For the life of me, I don't see how they can make a crib like that for four bucks!"

Laborsaver

Back in '29 a couple of cowmen were discussing their plight. "Just how bad are things with you?" asked one.

"Pretty tough," the other cowman replied. "My cattle are so thin that by using carbon paper I can brand two at a time."

Industry

An interested tourist approached a citizen of a small village and inquired, "What is the principal occupation of this town?"

"Well," the man answered yawning, "in winter they mostly sets on the east side of the house and follers the sun around to the west, and in summer they sets on the west side and follers the shade around to the east."

We Sympathize

No wonder a hen gets discouraged. She can never find things where she lays them.

100 Percent Workable

A teacher, annoyed with his clock-watching students, covered the clock in the schoolroom with a sheet of cardboard. On it he lettered these words: "Time Will Pass. Will You?"

The Error of Our Ways

(Culls From the News Columns)

It's a Fact

The queen bee is thought of as the boss of the dive.—*Waco (Texas) News Herald.*

When Fashion is News

"Special Sale: Men's Cotton House Dresses."—*Milwaukee (Wisconsin) Journal.*

Get-rich-quick Scheme

Directors take office next Monday. The treasurer takes off in July.—*Pottsville (Pennsylvania) Republican.*

To Put It Bluntly—

The bridesmaids' gowns were punk.—*Cape May County (New Jersey) Gazette.*

Fabulous Sale

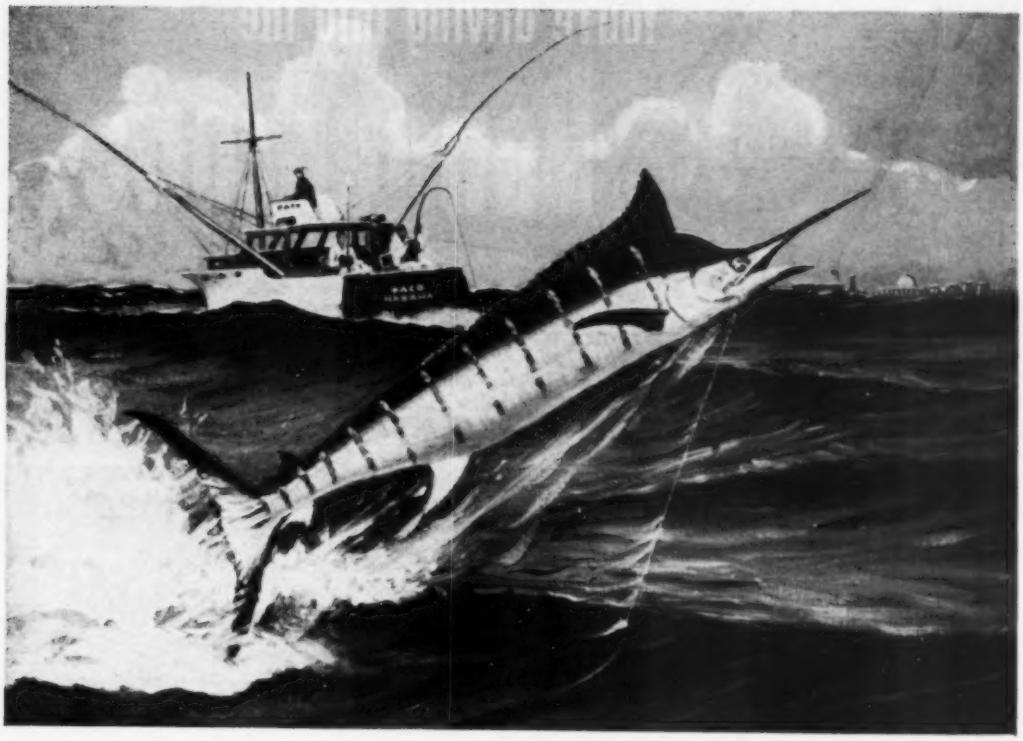
Three beans and casserole all for 79c. —*Butler (Pennsylvania) Eagle.*

Only the Strong Need Apply

For sale: Two-apartment home, occupied by two families in fair shape.—*Baraboo (Wisconsin) Shoppers' Guide.*

SUCCESSFUL FARMING

"Anybody seen the grasshoppers I was preserving in the ice cube trays?"



The line that catches everything . . .

when there are no fish near the surface

BY LYNN BOGUE HUNT, *well-known artist and sportsman*

— It's Monel line, made with the "friendly" metal.

It's the third day we've been fishing off Havana.

Under our boat's keel, the sea is oily smooth. The deck scorches our feet. Food and gasoline have run low, and tempers are short.

"Let's head back," I bark, "I'm tired of playin' hide-and-seek with these marlin."

That seems to trip something in the mate's mind.

He goes below. Then comes up, grinning.

"The Monel line," he cries, "—you said you'd try her some time. She goes down deep without heavy sinkers. Maybe she'll end your game of hide-and-seek with those marlin."

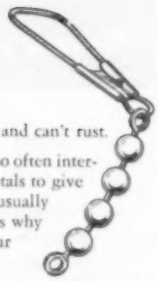
My reel pays off a hundred, two hundred yards of the tough, rustproof line. Down it settles, thirty, thirty-five fathoms into the deep blue of the Gulf Stream.

Ten minutes pass, and then I get a strike. A humdinger of a strike! I hit him once. I hit him again. My rod bends. My reel starts to sing, paying out line fast. The fight is on. . . . He runs, he jumps, he circles, he sounds . . . again and again and again. But my strong, flexible Monel line has what it takes to stay with him until he's brought safely on board.

— L. B. H.

Nickel gives Monel line the tough strength, the complete freedom from rust, and the high resistance to salt water corrosion that make this line a prime favorite with fishermen from coast to coast. Since Monel line is metal, it has enough weight to make it sink far beneath the surface. And so when there are no fish near the surface, it goes down to where they are.

In scores of different ways Nickel brings fishermen luck. Nickel in Monel bead chain swivels and spinners makes them non-rusting and long-lasting. Solid "Z" Nickel hooks are strong enough for the "fightin'est" fish and can't rust.



Because Nickel is so often intermixed with other metals to give special properties, it usually serves unseen. That is why Nickel is called "Your Unseen Friend."

"How to Catch Fish when they're not biting"*—New handbook by veteran fishermen, Fred Streever and Chuck Meyer. Tells how to get bigger catches of bigger fish in both fresh and salt water—from perch and porgies to tuna and marlin. Tackle tips aplenty. For your free copy, write Dept. 129z, New York 5, N. Y.*

THE INTERNATIONAL NICKEL COMPANY, INC.

EMBLEM OF SERVICE

INCO TRADE MARK **Nickel**

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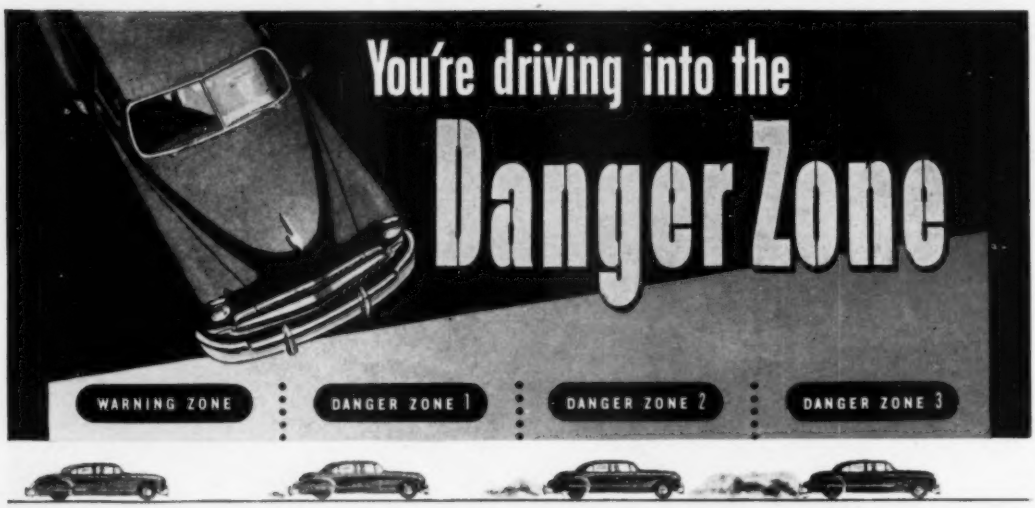
...Your Unseen Friend



Engine loses pep . . .

Needs a tune-up

Clean, adjust and re-time ignition. Clean fuel supply and carburetor screens. Adjust carburetor. Adjust tappets and fan belt. Check compression and vacuum readings for symptoms of ring wear.

Engine begins to smoke . . .

Needs new piston rings and minor engine repairs

Replace piston rings. Align rods. Adjust rods or replace rod bearings. Reseat and reface valves.

Tune engine.

These repairs are comparatively inexpensive and put the engine back in peak condition for thousands of economical miles. Delay puts the engine in Danger Zone 2.

Engine pumps oil badly . . .

Needs new piston rings and major engine repairs

Replace piston rings. Replace piston pins. Adjust—probably replace—main bearings. Align rods. Adjust rods or replace rod bearings. Reseat and reface valves. Tune engine.

These repairs naturally cost more than those needed in Danger Zone 1, but they put the engine back in condition for thousands of additional miles of satisfactory service. Delay leads to costly Danger Zone 3.

Destructive wear sets in . . .

Needs new piston rings and complete overhaul

Repairs cost three or four times as much as in Danger Zone 1.

Remove engine. Rebore cylinders. Replace pistons, pins, rings. Replace main bearings. Align rods, refit or replace rods, or replace rod bearings. Overhaul valve lifters, rocker arms. Replace timing chains or gears. Reseat, reface valves. Replace guides and springs. Replace camshaft bearings. Clean oil lines. Overhaul oil pump.

Clean, re-install and tune engine.

The more you delay - the more you pay !

Piston rings should be replaced . . . *at the first sign of wear !*

Piston rings are engineered to "take" the wear, to protect your engine, and to be replaced again and again. You'll be money ahead if you replace your piston rings when your engine first gets into the Danger Zone.

Replacing piston rings at this time is comparatively inexpensive. But if you delay—until you're in the second or third Danger Zone—your repairs will cost two to four times as much. If your engine is in any of the Danger Zones, ask your motor service man for Hastings Piston Rings. They're engineered exclusively for replacement use. They *stop* oil-pumping, *check* cylinder wear and *restore* performance.

It's the best money you can spend on your car, truck or tractor.

HASTINGS MFG. CO., HASTINGS, MICH. • Hastings Ltd., Toronto

HASTINGS STEEL-VENT PISTON RINGS

Your county needs a Mr. Spreiter

. . . a county agent specializing in farm buildings. When you've checked his 10 points for sound structures, turn to his reasons in the following article

1 **Plan your building before work begins**

2 **Make each building a part of the unit**

3 **Work out the design with reliable help**

4 **Use modern building materials and ideas**

5 **Consider comfort for yourself and animals**

6 **Follow the blueprint and don't change it**

7 **Don't cut expenses with poor material**

8 **Make framing strong with good fasteners**

9 **Build for tomorrow, not just for today**

10 **Make your buildings pay for themselves**

Farmers living in the five counties surrounding Onalaska, Wisconsin, have been giving the largest share of their farm building dollars to one man to spend for them. They've been doing this for 31 years now. It's the surest way they know of getting the kind of buildings they want for the money they have to spend.

The man who spends these thousands of dollars every year is Walter E. Spreiter, 26 years a county agent and the last 5 years a farm building specialist working in cooperation with the Agricultural Engineering Department at the University of Wisconsin.

Mr. Spreiter knows farm buildings. That's putting it mildly. For instance, in the last five years he has planned or remodeled more than 1,000 buildings! He hasn't kept track of the number he worked on in the preceding 26 years.

A man who has more than 1,000 farmers visit him in five years for help with their building problems must know his stuff. And after talking with Mr. Spreiter, I, too, am convinced he does.

Throughout "Farmerica," if every 5 counties, or even 10, had a building advisor like Mr. Spreiter, the money saved by avoiding building mistakes would be tremendous. Unfortunately, every community doesn't have a Mr. Spreiter. But some help is on the way.

The new Housing Act will help many farmers plan better buildings. Under this act, the Federal Extension Service will be able to hire two to four highly qualified agricultural engineers and home economists to be placed in each state. These experts will be working with county and home demonstration agents and will also encourage the states to assign county-agents-at-large to work on farm buildings, just as Mr. Spreiter is doing.

Many states now have the authority to assign experts to this work. New York has 10 county-agents- [*Turn to page 146*

By Dick Hanson

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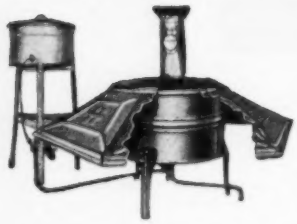

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No work – no worry – completely automatic. Two powerful, fully enclosed heating elements. Balanced heat distribution with controlled ventilation eliminates moisture, keeps litter dry. Fully insulated. Adjustable legs allow extra head room as chicks grow. Economical operation (usually less than 1c per chick). Sizes for 500, 300, 100 chicks.

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Your county needs a Mr. Spreiter

[*From page 145*]

at-large working on farm buildings and machinery.

If your state or county doesn't have a building expert at the present time, ask for one. After that, the next best thing is to have someone with experience point out what to do or what not to do when you build. That's what Mr. Spreiter has done for you in this article.

I asked him to pick the 10 building problems which he felt had given farmers the most trouble during his 31 years of experience. Maybe you'll recognize some of the problems he points out. Maybe you have already made a mental note to consult someone like Mr. Spreiter the next time you plan to build or remodel a farm building. But that's one of Mr. Spreiter's points, so I'll let him tell you about it:

1. "Before you buy even so much as a 2x4, you ought to know what you're going to do with it. By that I mean that you ought to plan the building. Not just for tomorrow, next week, or next month, but for the years ahead. You might be milking a big herd of cows now, but dairying gets to be quite a job as you grow older.

"As you grow older, you seem to have to squat down more, make more trips with the feed cart, or you start believing the cows produce more manure than they used to because it takes you longer to clean the barn. When that happens, you may decide to switch to beef or poultry, and that's when beforehand planning pays off. Plan your buildings to meet your needs, now and in the future.

2. "Right along with planning the building itself, don't forget that you have other buildings, too. The distance between the feed shed and the barn seems longer on a cold day than on a warm one, so plan each building as a part of your farming unit. Tie it in with the rest of your buildings to make your work as easy as possible. If you aren't building new—just remodeling—make sure you have the new door on the right side of the building. The view of the fields might be nice but you'll still have to walk all the way around the barn to get to the corncrib or granary.

3. "When you decide to build new or remodel, don't always go to your neighbor to see how he built his barn or farm kitchen. Maybe you think he has just what you want, and in some cases maybe he does, but chances are your method of doing things is just a little different from his.

"That little difference may mean trouble for you. Each farm has its peculiar problems, and usually no two farms are the same. Work out your building plans with your county agent, state college, or lumber dealer.

4. "And speaking of county agent and state college help brings me to another point. Keep up with the modern trend in building. By that I mean, don't build like Grandpa did. His methods are outdated and will mean extra work for you.

"Modern building practices, new materials, and new equipment have taken a lot of the time and backache out of choring. It's not considered the sign of a good farmer any more to wind up the last of the chores at 10 o'clock at night. Nowadays it's a successful farmer who

can do a good job of choring and still have the time and energy to take in a movie. There's more to farming than work.

5. "Right along with modern building practices and equipment, you should consider comfort. Comfort for yourself and your livestock. It's okay to tell the grandchildren how you used to milk 20 cows night and morning when the temperature in the barn was 10 below—but you probably won't want to tell them about the frostbitten fingers and small milk check.

"When building new or remodeling, plan your ventilation and insulation just as carefully as you plan the building. Use a moisture barrier and be sure you put in fresh air vents. You don't have to put up with a damp, cold building any more. The extra cost will be paid back many times in greater comfort and income.

6. "If you hire a carpenter to do your work, or if you do it yourself, follow the blueprint to the letter. Make sure both you and the carpenter forget how Grandpa used to do it. If a feed alley is 4'6" wide on the blueprint, that's what it's meant to be. And six studs won't do the job of eight. Everything that appears on a blueprint was put there to make your building as strong and serviceable as possible. Don't change it, and don't let your carpenter talk you into changing it.

7. "If you want to do your own building without using a blueprint, remember this: A building is only as good as the material and workmanship that go into it. Make sure your joists are heavy enough to do the job, and don't put them too far apart. Where you must brace, put in the right kind and plenty of them.

"Build strong footings for interior posts. The interior posts must carry more weight than the walls. The framing is the most important part of any building. Don't try to cut expenses by building poorly. You'll lose money.

8. "One of the least-thought-of items in most buildings is one of the most important. By that I mean how you fasten your building together. Too few nails, bolts, and timber fasteners have been the cause of many expensive and dangerous building failures.

"You wouldn't try to repair a piece of machinery with friction tape, so don't try to hold your buildings together with one nail in each joint. Also, it's not always the number of nails that count, but the size. Once nailed, or otherwise fastened together, a joint should remain rigid for many years. Here's another part of your building where you shouldn't try to cut expense.

9. "Building costs are always a problem. But, like everything else, there are times during building when expense should run second to satisfaction. Using 2x4's instead of 4x4's may be all right for a while, but it won't be too long before you'll be tearing them out and putting in new ones.

"As I said before, don't think only of the present when you build. You may have to pay heavily for your mistakes later. Buy good materials and materials that are right for the job they have to do. For instance, pole construction has been given a lot of thought in the past few years. And for many buildings, poles are all right, but don't forget, wood will never outlast cement or brick. For long-time performance, you can't beat a good cement or brick foundation with good

[*Turn to page 148*

HELP YOURSELF TO POULTRY PROFITS with HUDSON FEEDERS and FOUNTAINS

Famous HUDSON Kleen-Ezy® Feeders

Sloping sides keep feed sliding to bottom without packing in corners. Permit chicks to get up close to feeder. Feed-saving lip reduces "billing out." Non-roost reels or grill.

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One-piece heavy galvanized steel. No seam. 3 sizes: 18-in., 24-in., and 36-in.

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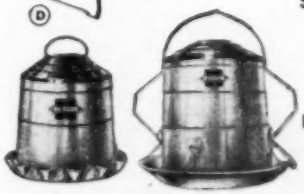
End stands quickly adjustable. 2 sizes: 36-in., and 48-in.

C. HUDSON BROILER FEEDER
Wing nuts permit easy height adjustment for chicks 2-weeks old up to broiler weight. Choice of hinged grill (shown) or reel.

D. FEEDER WITH FOLD BACK STANDS
End stands quickly adjust height for small or large birds. 48-in. with reel; 60-in. with grill.



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To fill, just remove pan, reverse handle and use as pail! Easy to clean, handy to fill and carry. Special saucer shape pan. Makes drinking easier; prevents wading. 3 and 5 gals.

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Your county needs a Mr. Spreiter

[*From page 147*]

lumber used for the structure framing.

10. "My last suggestion is one that should be obvious but sometimes isn't. Don't overbuild. You have to get out of a building what you put into it; the building must pay for itself or else it's a losing proposition. Many times farmers put up two buildings when one could be made to do the job. The trend today is toward versatility in buildings; that is, making one building do many jobs.

"Don't spend money when you don't have to. If you've got the money to put 12" of insulation in the barn walls, don't do it. Put in 4"—it will do a good job—and then take Mom and the kids on a vacation with the money you save.

"During 31 years of working with building problems, I have yet to see a really successful farmer who hadn't given some thought to his buildings. I once thought these successful farmers improved their buildings because they had money they didn't know what to do with. Now, I think their buildings were one reason they had money." END

News

Late soybean seed best

That soybean seed quality is influenced considerably by maturity date was indicated in tests conducted by the Missouri Experiment Station.

The poorest quality seed came from the earliest-maturing crops, with the quality improving steadily with later maturity. Apparently, early ripening came under relatively hot, dry conditions that helped cause poor quality.

The experiments also brought out other interesting facts about the soybean. The number of days required by any of the varieties from planting to maturity was not constant, but was influenced considerably by date of planting. For example, Ralsoy planted in southeast Missouri on April 20 required 174 days to mature, but when planted July 10 needed only 102 days.

Protein content of the seed showed a tendency to vary just in reverse of oil content. High oil content was associated with relatively low protein, and low oil with relatively high protein. Apparently, climatic conditions are responsible for the difference.—*H. M. Dail.*

Bromegrass-alfalfa silage

Of the five grass-legume combinations tested in a three-year experiment at the Pennsylvania Agricultural Experiment Station, bromegrass-alfalfa yielded the most silage. At the same time, in the rotation-management plots, orchard grass-Ladino clover meadow, carefully managed, produced a third more milk than adjoining bluegrass, thoroughly fertilized.

First cuttings of forage from the plots were harvested for silage; the following growths were used as summer pasture. Though bromegrass-alfalfa was the most prolific of the silages, orchard grass and alfalfa produced more milk as aftermath grazing, because of greater recovery power after cutting.—*S. R. Winters.*

Easy-to-build

trap nest

for turkeys

Turkey raiser Herbert Mulno, Wamesit, Massachusetts, uses this homemade trap nest in his breeding pen. The nest prevents other birds from disturbing a hen turkey while laying. The nest also features a simple arrangement to allow birds to enter or leave the nest.

The base is a wooden platform raised 1′ above the floor. Individual nests are built up from the base. Nests are 18″ wide, 24″ long, and 24″ high. The sides of the nests are boarded up and a 3″ board is nailed across the front at the bottom to keep the litter in the nest.

After the top of the nests is boarded over, short pieces of 6″ board are nailed to the partitions between the nests and perpendicular to the base. This leaves an opening 1′ wide for the turkey to enter.

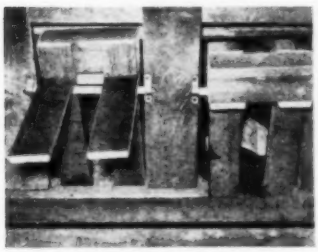
The gates to the nests are counterbalanced to allow the turkey to enter or leave with little effort. The two inside boards of the gate are 18″ long and the outside boards are 12″ long. A 10″ piece of 4″x4″ lumber is nailed across the tops of the two inside gate boards. This forms the balance weight.

The outside gate boards are mounted at right angles to the inside boards by using small blocks of wood. It may be necessary to add short pieces of wood to the outside of the 4″x4″ block to get the correct balance.

An old broomstick, a little over a foot long, can be used to mount the gate arrangement to the front of the nests. Metal collars were fastened outside the nests to hold the broomsticks in place.

Be sure the inside gate boards rest on the inside of the 3″ board at the bottom of the nest. The 4″x4″ block must be on the inside at the top. The block rests against a short 2″x4″ on the roof of the nest.

The turkey enters the nest by pushing against the gate. This offsets the block which drops outward, allowing the outside gate boards to drop down behind the turkey. No other bird may enter this nest while it is in use. The procedure is reversed when the bird leaves this individual nest.—*C. L. Stratton.*



To enter nest, turkey pushes gate inward. The gate boards close behind the turkey

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3. Right-Hand Pick-up—consistent travel	✓		✓	✓
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5. Synchronous Overhead Feed Roll—insures positive feed				✓
6. Open-End Rigid Auger—more positive feed				✓
7. Wadboard Type Hay Packer—forms bales evenly				✓
8. Bales Tied Under Compression—more firmly tied				✓
9. Big Capacity—up to 10 tons an hour—saves man-hours				✓
10. Inverted Anti-Clog Knotters—fewer missed bales				✓
11. Safe Side-Mounted Needles—higher ground clearance				✓
12. Sliced, Sectional Bales—makes feeding easier	✓		✓	✓
13. Automatic Bale Counter—records production			✓	✓
14. Straw Baling Tension Springs—heavier straw bales				✓
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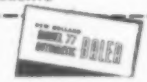

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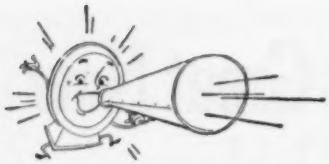

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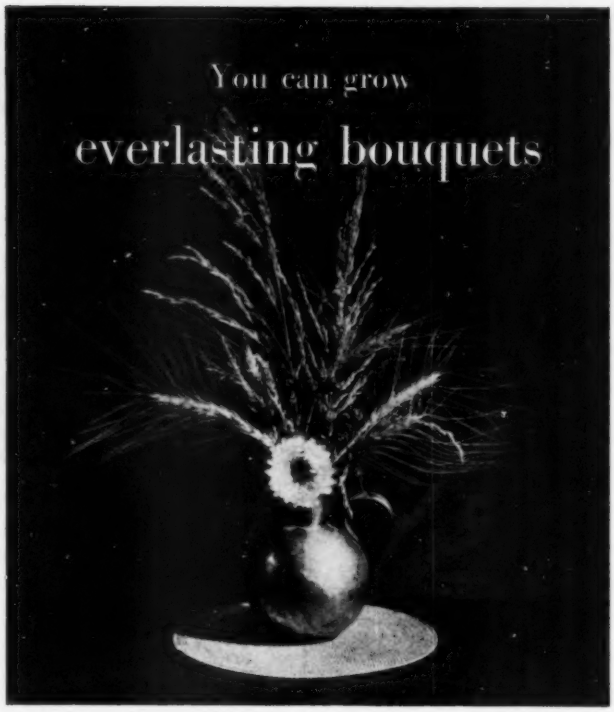


Everlasting flowers make striking winter bouquets. This cheerful arrangement was made with several dried grasses, bearded rye, and a single dried acroclinium

By Madeline Corse

Have you ever wished for flowers that bloomed 12 months in the year? You can have them—everlastings, the flowers that bloom while the garden sleeps!

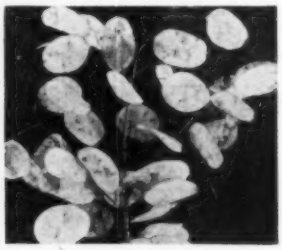
Everlastings are flowers that may be cut and dried for winter bouquets without losing their color or shape. In addition to those mentioned here, the common cockscomb and many wildflowers from the roadside may be used—gather and prepare them for winter bouquets just as you would garden-grown varieties.

No arrangement is complete, however, without the contrasting forms of dried grasses. These may be grown in the garden or gathered from the roadside. Most popular for garden planting are cloud grass, quaking grass, and zebra grass.

For best results, everlasting flowers should be cut before they are fully opened. After the foliage has been removed, the blossoms should be loosely bunched, tied, and hung with heads down in an airy place out of the sun. The back porch or tool shed is ideal.

For best results, do not arrange everlastings in vases until they are quite dry, and until the air in your home is dried by furnace heat. Suggestions for everlastings to plant are shown below.

Strawflowers like sunshine, dislike long dry spells. To make them bloom before summer drouth, start the seed inside for transplanting when the weather is warm. The gay colors will remain bright all winter when thoroughly dried



Honesty is a plant whose large, transparent seed pods add drama to a dried arrangement. The flowers are valuable, too, for early summer bloom. Follow directions on the packet for planting. Harvest the pods before they shatter

More on page 159

HERE'S IMPORTANT *NEW* INFORMATION ABOUT SHEETS!

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PEPPERELL SUPERFINE MUSLINS PROVED 36% STRONGER than regular muslins where it counts—in the crosswise threads that are first to break when sheets wear out. Extensive breaking tests bring new proof that Pepperell Superfine Muslins are far stronger, far longer-lasting!

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Pepperell Manufacturing Company,
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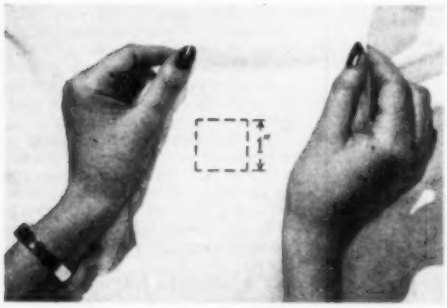

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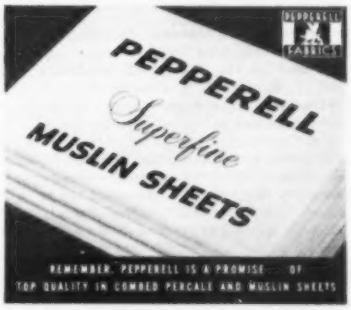

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FRIGIDAIRE Food Freezers for the Farm

Occupation Housewife

[*From page 60*]

purchasing, sewing, baking, and keeping things in good condition all make your dollars go further.

There's more variety in housework than in any other occupation I know. You're a dietician, cook, dress designer, seamstress, interior decorator, nurse, buyer, and so forth. I can hear you say, "But don't forget cleaning, washing dishes, ironing, and peeling potatoes."

Yes, these are monotonous tasks; but while they are time- and hand-consuming, they do not take mental concentration. At the same time we perform them, we can listen to newscasts and music on the radio, tell Junior a story, or even learn poetry.

Every job has some undesirable features which must be dealt with regularly. In the case of housework, the chores most distasteful to you can be partly defeated by the use of efficient methods. Your public library or agricultural extension service can tell you about many helpful books and pamphlets on the best techniques for doing essential housework.

The fault may be that we set our standards too high for comfortable living. I know there are people who really enjoy scrubbing and keeping a house always in perfect order. Unfortunately, I'm not one of them. I like our house to be clean enough for us to be healthy, and neat enough so that we can find things, but otherwise I want the house to be merely a background for our living. On the other hand, I enjoy cooking, so I try to excel at that.

It's just common sense to yield to your own desires as much as is practical. For if you have a martyr complex from slaving all day at a distasteful task, it will be a sad evening for your family.

If your necessary work is planned efficiently, you should be able to enjoy a few free hours during the day and evening to catnap, read, tend to your personal grooming, or indulge in a hobby.

A spare-time hobby will make you more interesting to your family and friends. It also will help you to attain the golden mean between meddling in your children's affairs and being bored as they grow older.

When you excel at your hobby, it may earn you a little extra money for better housekeeping equipment, or for hiring someone to care for the children while you and your husband recapture that two-together feeling with an evening out.

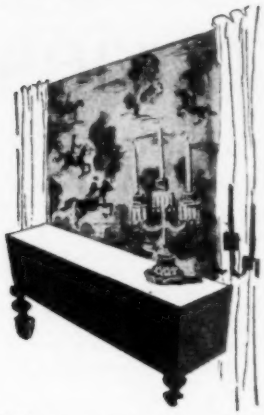
Photography, writing, hooking rugs, crocheting, canning—all may result in checks. Or if you can play the piano, make beautiful handmade gifts, or bake an extra-special cake, you will give added enjoyment to your family and friends. At the very least your hobby will give expression to your creative urge.

It's the realistic housewife who questioningly examines her day to decide which work is essential and then does it by the most efficient method. Yes, she'll even be glad to let the career girls have their typewriters while she stays home where it's her right to sit on the boss' knee.

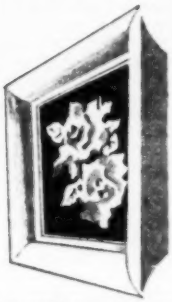
The lucky housewife may never reach perfection—who does?—but she has a God-given opportunity to make each day a joy for her loved ones and herself. **END**

Ways with wallpaper

[*From page 80*]



Add interest and color to your dining room with a scenic mural. The space between two windows can be papered and the rest of the walls left in a solid color. Or paper a panel the width of a chest of drawers. By choosing a good scenic wallpaper, you can give a room a larger and more distinctive appearance



Make a wallpaper cutout into a handsome picture for your wall. Cut around a large flower or a scenic design and mount on heavy paper. Put it in an old picture frame painted to harmonize with the colors in the wallpaper design

For a teen-aged girl's room, try this: Outline the dressing-table mirror and area around headboard of the bed with bands of wallpaper flowers. Use a border design or cut-out flowers. The flowers can serve as a key to choosing bedspread, drapery, and other colors. **END**

Nice Looking! Beautiful, modern exterior with pleasingly balanced design, graceful cove top, gleaming chrome oven interior. Easy-to-work-at, easy-to-clean, roomy divided top.

Nice Cooking! Exclusive Tel-U-Set brings automatic cooking to your finger tips even if you live beyond the gas mains . . . assures you perfect results every time. Wonderful for modern low-temperature cooking methods.

And such a nice buy! Whatever price you intend to pay for a range, Tappan brings you top value for your money. Models for city gas, Philgas or other LP Gas. For helpful hints on range buying, write for free folder to The Tappan Stove Company, Dept. 91, Mansfield, Ohio. In Canada, John Inglis Company, Limited, Toronto.

TEL-U-SET

TEL-U-SET starts, times, stops cooking. Includes: automatic clock . . . "Oven-On" signals . . . timed appliance outlet . . . Visiguide time and temperature chart . . . Visiminder (signals when cooking is done).

CRISP-CHEST

Crisp-Chest keeps cereals, crackers, potato chips, condiments, salt, sugar absolutely dry and fresh. The Crisp-Chest is ideal for the storage of all foods that require protection from moisture.

You'll say too . . . I'll take

TAPPAN

Gas Ranges

Your guide to the best in modern automatic cookery

automatic lighting of all burners – **automatic** oven heat control – **automatic** oven time control
automatic oven illumination – **automatic** interval timer – **automatic** "burner on" signals

"Our Sunday harvest is the talk-of-the-town!"

— says **MRS. MILFORD LANGLAS**

"The only thing we harvest on Sunday," says Mrs. Langlas of Marengo, Iowa, "is a crop of friendly gossip, local chatter, and recipes!

"So Sunday is our favorite day—a day we can dress up, go to church, and socialize with the neighbors. But I put all this away Sunday night. And I get set for a week of socializing with the wash-tub, house chores, and farm work.

"Yet with all this work, I keep hands Sunday-beautiful with Jergens Lotion!"

"Swinging milk buckets is tough on hands," says Mrs. Langlas. "So I make sure my hands get daily care with Jergens Lotion. Jergens Lotion keeps hands smooth, and soft as quilting cotton."

"Beautiful flowers can make ugly hands. After every weed-pulling session, I head straight for Jergens Lotion to hold down roughness, chapping." Only 10¢ to $1.00, plus tax.

Try this film test. To soften, a lotion or cream should be absorbed by upper layers of skin. Jergens contains *quickly-absorbed* ingredients doctors recommend — no heavy oils that *coat* skin. Proof? Water won't form "beads" on hand smoothed with Jergens Lotion (left) as with lotion or cream that leaves a heavy, oily film (right).

More women use **Jergens Lotion** than any other hand care in the world!

The new movies

By Betty Camp

Why do you go to the movies? Main reason, of course, is to relax and to forget the pressure of daily duties. To our way of thinking, nothing quite answers this purpose like a top-notch comedy. You'll welcome the four reviewed here, especially after the recent epidemic of war pictures and those dealing with social evils.

For your further enjoyment and information, we've included mention of excellent educational films which can be shown on any 16mm projector. Send for one for your next farm group or club meeting.

Mother Didn't Tell Me . . . that a doctor's wife sees less of her husband than do his patients. In this hilarious domestic comedy, Dorothy McGuire plays the unfortunate gal who marries her hard-working physician, William Lundigan.

She soon discovers that friend husband, like most doctors, is always away on emergency calls at the wrong time. As a result, the household is kept in constant turmoil. Further developments include a scheming brunette, a bouncing set of twins, a rhumba-mad psychologist, a misled investment in a broken-down house, and an annoying mother-in-law. The whole mess makes for bedlam—and laughs. (Fox)

If you like your comedy buttered with sprightly tunes and served in gay Technicolor, you'll enjoy **Nancy Goes to Rio.**

Plot concerns a New York stage actress (Ann Sothern) and her teen-age daughter Nancy (Jane Powell) who, unbeknown to each other, go after the same lead in a play. Both head for Rio to "live the part."

Action begins on the boat when Nancy falls in "love" with an attractive but much older man (Barry Sullivan) and meets up with the fireball of South American rhythms, Carmen Miranda. To date, this is Jane's best movie by far. (MGM)

Vivacious Jane Powell and her boy friend, Scotty Beckett, dance in *Nancy Goes to Rio*

Funny, but exaggerated to the point of absurdity, is Fox's **When Willy Comes Marching Home,** starring Dan Dailey as Willy, Corinne Calvet, and Colleen Townsend.

It seems Willy is Punxsutawney's first boy to enlist in service, the eager beaver who wants to get overseas with the first volunteers and become the great hero.

However, and to his dismay, Willy is forced by the Army to serve in his own home town. The war goes on and on, but Willy doesn't. People begin to think he's a goldbricker, avoiding active duty.

Then, in four days he flies to Europe and comes back home again after an incredible series of wild adventures. In France he hooks up with the French underground, discovers Germany's new rocket weapon, is whisked back to London with his tremendous secret to see the top brass. Then he is flown to Washington where the greatest military leaders interview him. Transferred to a hospital, he wanders into the psychopathic ward, escapes back home to be finally proclaimed—by Washington—a national hero.

Frankly, it takes more than imagination to swallow this one!

The old stand-by, always a favorite, is a Bing Crosby movie. The veteran showman's newest is Paramount's **Riding High,** which casts the popular crooner as a happy-go-lucky race horse owner.

Story opens in Higginsville, a principality ruled by J. L. Higgins (Charles Bickford). The domineering J. L. owns practically everything in it, including a couple of sons-in-law he has placed at the head of two of his many enterprises.

Bing, who is about to marry into the family, rebels when J. L. insists he sell his favorite horse. Refusing, he storms out—not to return until he has proved his horse a winner. A feeble plot—but no one much cares when Bing swings into his new numbers, destined, we'll bet, for tomorrow's hits.

Good films

for home or meeting

The idea behind every machine starts in the mind of a man who has a problem. **It's News Because It's New,** color film produced by RKO Pathe News, presents new farm machinery ideas, all ingenious inventions of actual farmers. A few of

[*Turn to page 156*

Crosby and Clarence Muse discuss chances of winning the derby cash in *Riding High*

Hair styles in this picture by Don Rito, famous Hollywood hair stylist.

Toni looks as lovely as a $20 permanent*
—feels as soft as naturally curly hair

Now—*any* day, *any* time—for only one dollar you can get a wave that's caressably soft—like naturally curly hair . . . and guaranteed to look just as lovely, last just as long as a beauty shop permanent costing $20. (*Including shampoo and set.)

What's Toni's secret? It's the lotion. Toni waving lotion is an exclusive creme formula developed through years of research. This gentle-action formula was especially created to give you a wave that's free of harsh frizziness—a wave that *feels* and *behaves* like naturally curly hair. But remember, *only* Toni Home Permanent gives you this superb waving lotion.

Wonderful results—again and again! What better proof of Toni quality! Toni is the only permanent that has given over 67 million lovely, long-lasting waves. Some women have used Toni ten times or more and say their waves are always soft, natural-looking, easy to manage. Letters of praise come from women with every type of hair—even gray, bleached and baby-fine hair. So whether you are buying your first Toni Home Permanent or your tenth, you can be sure of getting a wave that looks as lovely as a $20 permanent—feels as soft as naturally curly hair. Jean, the twin on the left, has the Toni.

P. S. For complete hair care get Toni Creme Shampoo and Toni Creme Rinse, too.

"I'm not a twin, but since I tried Toni, no other permanent will do for me," says Mrs. Myron Albertson of Los Angeles. "Toni works wonders for my baby-fine hair. Never frizzes it . . . always gives me a soft, natural-looking wave."

TONI *SPIN* CURLERS
twice as easy - twice as fast

All plastic. No rubber bands. They grip the hair . . . spin up the curls . . . and lock with a flick of the finger.

Available in combination with Toni Refill . . . only $2.29

She dresses up herself—

and her kitchen!

"Garden Glory" on shelves

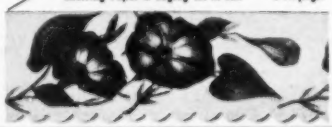
When you "dress up" your kitchen, it reflects your personality so much more beautifully—and you get more enjoyment from the hours you spend there! It's so easy with colorful Royledge Shelving . . . in just a few minutes, for a few pennies, you scatter glorious, flattering color all over the room. New "Plasti-Chrome" Royledge is brighter, gayer, stronger than ever. See new patterns now at 5 & 10's, naborhood, hardware, dept. stores.

Trade Mark "Royledge" Reg. U. S. Pat. Off.

Plasti-Chrome

Royledge

Shelving Paper & Edging all-in-one 9-ft. pkgs.



Service Building Book—50c

Shows you how to build better farm buildings for more profitable farming. There are illustrations and floor plans for all kinds of farm buildings—from general purpose barns to hog houses and machine sheds. Includes a complete remodeling section.

Order your copy today from Successful Farming, 2804 Meredith Building, Des Moines 3, Iowa.

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METRO ADDING MACHINE only **$19.95** Including Fed. Exc. Tax

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Gives correct size for trucks, machinery, etc. —tells how to use Tarpaulins for profit on the farm. Send card today for your copy.

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A special catalog of fine tools that will help you make repairs faster.

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COMBINE with the *Innes* WINDROW PICK-UP & FEEDER!

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Success in windrow harvesting depends on careful handling!

INNES PICK-UP

Patented piston action picks entire windrow up clean, without wrapping, clogging or shelling. Light, and easy to attach. Stiff and spring finger models to fit most combines.

INNES FEEDER for full length threshing cylinder. Separates and smooths out toughest windrows. You travel 1/3 faster, save up to 50% more grain. *All Innes products are precision-built of finest materials. A responsible firm, Innes Company stands behind every purchase.*

See your dealer, or write Innes Co., Bettendorf, Iowa.

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The new movies

[*From page 155*]

them are: A fast-working chicken-picking machine, a machine which injects fertilizer underground, a tractor attachment for fast barn cleaning, a machine which sprays insecticides into the soil, a jumping plow which avoids rocks without stopping.

Free of charge from The Texas Company, 300 Baker Building, Minneapolis 2, Minnesota.

The Miracle of Corn Growth. Through the use of the new, time-lapse photography, you actually see a seed of corn germinate, break the ground, and grow to maturity. This color film also demonstrates soil testing and shows you how to recognize a corn plant deficient in elements or attacked by fungi. Excellent!

Free from Pfister Associated Growers, Inc., Aurora, Illinois.

Old MacDonald Had a Farm. Story opens as old Mac is about to sell his home farm. Why? Because all he does is work, yet he is always far behind schedule. All the time, the answer to his troubles stands idle in his machine shed.

This film shows how to avoid back-breaking labor by putting your tractor on a full-time work basis. You'll see how it can be made to plow and harrow in one operation, turn windrows, make drainage ditches, harvest forage crops, clear weeds, saw wood, even clean out a stable.

It passes along to you laborsaving ideas which resourceful farmers have used to increase their working capacity.

Free of charge from Ethyl Corporation, Chrysler Building, New York 17, New York.

Stepsaving Kitchen. This film shows a modern farm kitchen designed and built by the U.S.D.A. Bureau of Human Nutrition and Home Economics. The kitchen is attractively designed for fullest efficiency. Perhaps you can't build the entire kitchen, but you can adopt many of the ideas to save needless walking, stooping, and bending.

To rent, write to the Visual Education Distributing Department of your state college or university, or directly to the United States Department of Agriculture, Washington 25, D. C. **END**

SUCCESSFUL FARMING

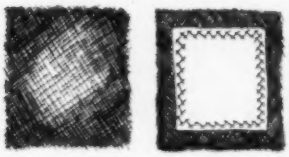
"What's my rock collection doing down here?"

Mend in advance

This easy method of patching adds many days of good wear to your family's work clothes

"I hate to see patches," writes a clever Indiana reader, "so I experimented until I found this secret of inconspicuous mending. *Don't give those would-be holes a chance to break through.*" Let's hear her story:

The minute a place begins to wear thin, I catch-stitch a hidden patch right beneath it. Working from the wrong side, about ½ inch in from the edge of the



patch, I insert the needle in a right-to-left direction, catching only a few threads of the garment before bringing it up and pulling the thread through.

Place the next stitch, made in the same way, about ½ inch to the right and about ¼ inch inside the regular line of sewing. For the third stitch, move right another ½ inch in line with the first. Line the fourth stitch up with the second and continue on around the patch in this zigzag fashion. See drawing above.

To allow for easy fitting, I cut the patch an inch larger all around the worn spot. And, by stretching it a bit as I add it, the patch can be made to take nearly all of the strain away from the garment. Yet it's so well concealed, it scarcely shows on the right side.

Reinforce shirts across the back by cutting a patch from the back of a discarded shirt. Place the patch, tail up, on the inside surface and pin from shoulder seam to shoulder seam of the shirt to be patched. Now, smooth the patch down firmly with your hand and pin again at the armhole seams. Cut off at desired length and pin at the corners and the middle of each outside edge. Remove the pins, one at a time, and stretch the patch about ⅛ inch on each side.

Turn the shirt inside out and, with your sewing machine, *follow the original stitching* right around the armholes and across the upper back saddle seam.

Secure the lower edge with a simple zigzagging catch stitch (see drawing), trim away all of the excess material, and

[*Turn to page 158*

Here's a "FLOOR PLAN" that's good for any home!

YES, regular cleaning of kitchen and bathroom floors with Clorox is a good "floor plan" for any home!

For even in the cleanest homes, harmful germs can be tracked onto floors. And in kitchen and bathroom such germs are especially dangerous. In the kitchen, they're near food. In the bathroom, they may come in contact with bare feet!

That's why it's a good idea to include regular Clorox-cleaning in your "floor plan." For Clorox not only removes stains and deodorizes . . . it disinfects . . . provides added health protection for your family!

Directions on Label

You get these 2 BIG EXTRAS with CLOROX

1. GENTLER BLEACHING ACTION ...longer life for linens!

2. GREATER DISINFECTING EFFICIENCY ...added health protection!

Clorox conserves costly linens and does a better job of disinfecting because it's free from caustic and other harsh substances ... made by an exclusive formula protected by U.S. patent!

Copr. 1950, Clorox Chemical Co.

CLOROX . . . AMERICA'S FAVORITE BLEACH AND HOUSEHOLD DISINFECTANT

Now! SAVE MONEY ON FARM SHOES!

Outwear ordinary shoes. Made for farm wear from selected, toughest cowhide. Oil-impregnated soles resist burnyard acids. Spring-steel arches. Light weight. GUARANTEED to assures housslipper comfort or your money back. Buy direct — only $8.95. Send your size, or tracing of your stockinged foot, with check or money order for postpaid shipment; or C.O.D. plus postage. For FREE folder, write

FOOT HEALTH CORP. • FREEPORT, ILLINOIS

HOT WATER —plenty of it!

With G-E, the Finest Water Heater for Farm Use . . . and the Safest!

Install it anywhere . . . it's *safe* . . . no flame, no flue, no fumes!

Completely automatic—hot water when you want it!

Dependable . . . backed by liberal 10-year protection plan!

Easy on the pocketbook!

Insist on a G-E Water Heater . . . see your dealer, today!

AUTOMATIC ELECTRIC WATER HEATER

GENERAL ELECTRIC

Decorating advice. Stores offering Successful Farming's home planning service are listed on page 75. Visit the store nearest you for help with your decorating problems.

DEAF?

HEAR BETTER Or Pay Nothing

Why pay $150 to $200 for a hearing aid when the new Zenith "Miniature" at only $75.00 is guaranteed to give you all the power and performance you need if your hearing can be helped by a hearing aid.

The Zenith "Miniature" is as new and advanced as Zenith's Radio, FM, and Television Sets—world famous for top quality. Tiny, jewel-like, beautiful—weighs only 6¾ oz. with batteries. Needs no "fitting." Comes ready to wear. Let a trial of this new, sensationally-priced Zenith prove it can save you real money two ways—on original cost and on upkeep expense. Surprisingly economical. Here's Zenith's amazing guarantee: If any $200 hearing aid outperforms Zenith in efficiency or economy, your money back—under our 10-Day Return Privilege. Dealers in all principal cities. For Authorized Zenith Hearing Aid Dealer in your locality consult your classified telephone book; or write for complete coast-to-coast dealer list. Don't live in a world of silence when it is now possible for the hard of hearing to even hear a whisper. For free descriptive literature, address:

Zenith Radio Corporation, Hearing Aid Division
Dept. 449, 5801 West Dickens Avenue
Chicago 39, Illinois

Makers of World Famous Zenith Radio, FM and Television Sets

Prevent these Discomforts

chafing trouble

formation of odor

belt-and-pin annoyances

bulky external pads

tub and shower inconvenience

bulges under clothing

with Tampax!

Tampax is a simple, natural way to solve the year-round problem of monthly sanitary protection for women and girls. The doctor who perfected Tampax based his invention on *the old medical principle of internal absorption....* By the use of a patented throw-away applicator this method is now made available to all women for home and general use.

Tampax is *so* much smaller in size than the older forms. It is easily disposable and need not be removed for tub or shower. The neatness and daintiness of Tampax appeal to most women, reducing the tenseness and self-consciousness common at such times.... You cannot *feel* the Tampax and there is no odor. No bulges or edges can show through skirts or dresses.

Buy Tampax at drug or notion counters. Three absorbency-sizes: Regular, Super and Junior. An average month's supply will slip right into your purse. Tampax Incorporated, Palmer, Mass.

Accepted for Advertising by the Journal of the American Medical Association

Mend in advance

[*From page 157*]

the patch is completed—in just a jiffy.

This is a wonderfully effective way to mend the sleeves of work shirts, as well as the legs and seat of overalls. Be sure to stretch the patch from one solid seam to another. Then restitch along the original stitching wherever possible and catch-stitch the other edges. Trim away the excess patch with pinking shears. The whole thing takes only a minute and prolongs the wear of work clothes.

Frayed collars, cuffs, and shirt fronts are prevented in our work wardrobes by a little extra stitching while the garments are still in good condition. Sew over all collarbands a time or two at both ends. Then restitch along the original stitching on the front panel and the cuffs, adding a row or two at the end of each cuff for good measure. I find that this keeps them looking neat and trim.

Overall legs are easily kept from tearing open at the bottom of the pant leg by simply stitching around the lower edge once or twice at the first sign of a breaking hem. This extra stitching holds it fast and pays off in saving later mending time. As long as the hem is firm, I find the side seams stay.

Stocking darning is simplified when done ahead of time, too. When a worn spot appears, work back and forth across it with a running stitch, catching the thin place before the stocking loses shape. And instead of using darning floss, try No. 50 thread. It's solid, yet longer wearing and noticeably less bulky. **END**

"Puttering" apron

At home in the garden or on a repair job around the house is this quick-to-put-on "puttering" apron. Four ample pockets keep all the gardening essentials or carpenter's tools right where they're quick and easy to use.

You can stitch it up in a minute from a yard of denim. Cut the shorty from your favorite butcher-type pattern, adding a strip 10 inches wide for pocket sections as shown below. Finish with 4-inch strip folded to make 2-inch top band. Attach 1½-inch-wide ties, and the apron is ready for year-long service—a boon to a busy homemaker.—*Margaret McCormick.*

MODERN LIVING

for only a few cents a day with a McDONALD Water System

Let America's finest water system bring you the labor saving convenience of running water. Be modern, go modern with a dependable McDonald Water System. Enjoy plenty of water at your finger tips 24 hours a day. It costs no more to own the best and there is a McDonald Water System to fit your needs.

SEND A POSTAL CARD for literature and the name of your nearest McDonald Dealer.

A. Y. McDONALD MFG. CO.
DUBUQUE, IOWA

EST. 1886
McDonald

HELPING THE CENSUS HELPS UNCLE SAM ★ MAKE SURE YOU COUNT IN AMERICA'S FUTURE ★
1950 CENSUS

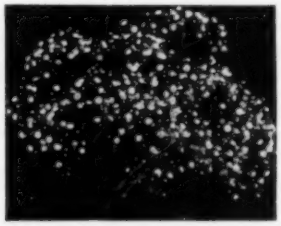
"THANKS FOR HELPING ME KEEP REGULAR!"

"I'm not writing for a refund, but to *thank* you for what ALL-BRAN has done for me. It's a wonderful regulating cereal!" Mrs. B. Metzler, 94 Maxwell Ave., Rochester 11, N. Y. *Just one of many unsolicited letters received from ALL-BRAN users.* If *you* suffer from constipation due to lack of dietary bulk, expect amazing results. Eat an ounce of tasty Kellogg's ALL-BRAN for breakfast daily, drink plenty of water! If not *completely* satisfied after 10 days, send empty carton to Kellogg's, Battle Creek, Mich. Get DOUBLE YOUR MONEY BACK!

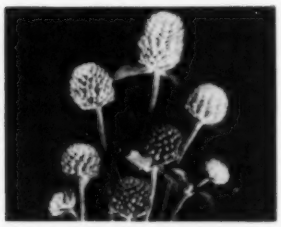
Everlasting bouquets

[*From page 150*]

Chinese lanterns are better known for their seed pods than for blossoms. The red "lanterns" form after flowering ends in late summer of the second year. When balls have formed, cut the branches and hang in the shade to dry



Babysbreath, consisting mostly of tiny white or pink blossoms, gives a misty effect when massed in borders. Dried, it gives lightness and grace to a winter bouquet. Can be easily grown by following directions on the packet



Red and orange blossoms of the globe amaranth resemble clover heads. To plant, remove cottony coating from the seeds and start inside. Set out in masses for best outdoor show. Pick for drying when the buds first break open

Statice is best all-purpose flower. Its small clusters bloom a long time in the garden and last for months when dried. Plant in rock gardens or in low borders (about 2 feet high). Statice is effective in either fresh or dried arrangements. **END**

THIS MONTH

SPRING CLEANING
Must Guard Against Germs

MRS. GEORGE WILSON, HIAWATHA, KANS., stresses: "This is the time I make special use of 'Lysol' to fight germs on walls and woodwork, and in all our closets and cabinets."

Modern Farm Mothers Fight Infection Risks

A HOUSE can *look* clean, yet be far from hygienically clean, as these alert mothers so rightly observe. So they fight invisible disease germs with potent "Lysol" brand disinfectant in every pail of cleaning water.

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DELCO-REMY

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Tillage

[*From page 44*]

covered twice with each unit. But when plowing sod, or when the soil was somewhat dry, more than two discings were required to work the surface into a suitable seedbed.

7. Auger-type plow, which mixes the vegetation throughout the worked layer of soil. It usually was necessary to go over the ground twice, and then the penetration was only 4 to 4½ inches.

What were the results? On the clay loam, no method of tillage proved superior to the conventional plow followed by normal tillage. The method which included the plow with the subbases *did* result in higher yields with all crops than those where the conventional plow was used.

But the differences were not great. The yields from the plots where the only tillage between plowing and planting was done with the plow-packer were about equal to those obtained from plots given the conventional tillage.

Oats and corn on this soil followed cleanly cultivated crops. There was no vegetation to work into the soil. With both crops, the two methods of rotary tillage resulted in yields fully as high as any other in the experiment.

In the case of sugar beets, however, where the corn stover had to be worked into the soil, the yield resulting from the use of the auger-type plow (9.42 tons per acre) was much less than any where a moldboard plow was used.

The yield obtained on the rotary-type tiller plots was also relatively low—10.26 tons per acre—compared to a yield of 11.40 tons where the tillage method included the plowing with subbases, and 11.20 tons from plots where the soil preparation was conventional.

The vertical-disc plow compared favorably with the conventional plow on oats and corn yields.

Navy bean yields were low where the soil was prepared with either of the rotary machines, due, no doubt, to the necessity of working into the soil a heavy growth of sweet clover. The plots were covered two or more times with the machines, but still were not in good condition for seeding. Poor stands resulted.

The work on the sandy soil has been going fewer years than on the heavier soil, but the results so far show certain definite trends. Two crops—corn and beans—were planted after bromegrass in 1947. Where the grass was not turned under, a great deal of hoeing was necessary to keep the plots clean.

> **Contentment is natural wealth; luxury is artificial poverty.** —*Socrates*

Corn yielded 40.9 bushels per acre where the tillage had been conventional. It was slightly higher than that, as an average, on all other plots except where the mulcher was used—where the yield per acre was 39.7 bushels. On the whole, corn yields did not seem to be greatly affected by the various methods of tillage.

Bean yields in 1947 seemed to fall into three groups. The highest yields were obtained on the plow-packer and mulcher plots. The lowest were on those plots

where the sod was mixed with the surface soil, with the rotary- and auger-type machines. The yields where normal tillage followed the use of the conventional and subbase plows were in between.

These results indicate that the most desirable seedbeds are those where grass and weeds are well covered—so they will not compete with the crop—but where the soil is not too firmly packed. This condition resulted from the use of either the plow-packer or the mulcher.

In 1948, corn was again planted after bromegrass. Where the sod was mixed with the worked layer of soil with the rotary-, the auger-, and vertical-disc-type machines, yields were lowest. Wherever

> **Ask, and it shall be given you; seek, and ye shall find; knock, and it shall be opened unto you.** —*Matthew 7:7*

the sod was turned under with the conventional plow, yields were considerably higher. We had the best average yield where the plow-packer had followed the plow as a "once-over" operation, and planting had immediately followed!

Oats yields in 1948 were reduced by weed competition, on the plots which were not turned with the moldboard plows. The oats was following white beans, where bromegrass had not been entirely controlled in 1947. The yields from the plots which had been turned with a moldboard plow ranged from 51.0 to 53.8 bushels per acre. Those which had been worked with the rotary tiller, the auger-type plow, and the vertical-disc plow yielded 31.7, 38.8, and 48.7 bushels of oats respectively.

It was of especial interest that the yields from the plots where planting was done with the plow-press drill attached to the plow-packer were as high as with any other method of tillage. This conforms with the results on the heavier soil. It suggests a way in which farmers might save considerable tillage expense for this crop, and also prevent some of the excessive packing which often occurs where oats land is prepared by numerous operations, often while the soil is too wet.

Big yields of beans and corn cannot be expected unless weeds are controlled. In 1947, both of these crops on the sandy loam were planted after bromegrass. Where the moldboard plows were used, the bromegrass was turned completely under. The crops were then planted immediately after the soil had been worked.

In the case of the corn, the least time was required to hoe the plots where the only tillage following the plow was the use of the mulcher. The time requirement for those plots was 74 percent of that required where tillage was conventional. In contrast, the hoeing time where the sod had not been turned over completely ranged from 145 to 174 percent of that required on the conventionally tilled plots.

The differences in time requirement were even greater in the case of beans. The cleanest plots were those where the plow-packer followed the plow, without further tillage. There, the time requirement was 61 percent, as compared to a time requirement of 95 percent on the mulcher plots, and 188 percent, 210 per-

Turn to page 162

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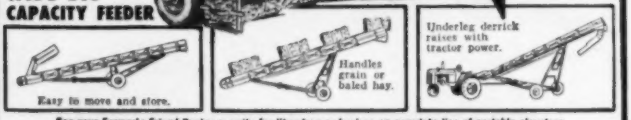

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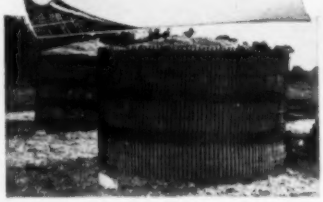

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Tillage

[*From page 161*]

cent, and 195 percent on plots fitted with the rotary tiller, vertical-disc plow, or auger-type plow, respectively.

Before we draw final conclusions as to just where each type of tillage equipment will be suitable, many more tests need to be run. However, from the facts learned to date on this group of experiments, we feel these are fair observations:

1. Wherever we had average soil conditions, with the surface practically free of vegetation, the yields were about the same from using all types of machines.

2. The use of the mulcher or the plow-packer attached directly behind the moldboard plow, giving "once-over" seedbed preparation, seems to offer good chances of cutting the cost of seedbed preparation and still keeping up satisfactory yields.

3. Where crops followed sod, the easiest weed control was by tillage methods where the sod was completely turned under.

4. On heavy soils, slightly higher yields resulted from the use of a subbase plow, which loosened the soil to a depth of 9 inches.

5. Where weed control is not a problem, the vertical-disc plow, with its wider cut, might be used in place of the regular moldboard plow, making it possible to do a faster job of plowing.

6. It was found that when land with a heavy cover crop was worked in such a way that the vegetation was mixed throughout the top layer of soil, the yield on the next crop was substantially lower than that obtained by other methods of soil preparation.

Therefore, from what we've learned, it might be said that the use of the moldboard plow followed by normal tillage will produce yields as high as by any other method. However, under certain conditions, other methods of tillage might give just as good results and may be preferred by individual farmers. **END**

Easy bale handling

Baled hay is moved from field to mow with a minimum of effort on the Palmer brothers' farm, Lincoln County, Missouri. They back a truckload of baled hay up a ramp right into the haymow. The ramp is made of 2"x10" lumber.

The first load of baled hay is unloaded to the rear of the mow. The upper part of the second load goes on top of this; the lower part of that load then is put on both sides of the truck. —*Francis Kutish.*

More eggs, less work

[*From page 48*]

his use of deep litter. In the fall, when the flock's year is started, the laying house is cleaned thoroughly, scrubbed, and disinfected. New shavings, more than a foot deep, are put in then as litter. Chopped corncobs or chopped straw could be used. Some of his neighbors like them as well as shavings.

Deep litter, Anderson has found, absorbs the droppings. It stays dry most of the time and, in fact, is drier, he says, than an inch or two of straw changed every week. Shavings added two or three times a year on top of the original layer help to keep the litter fresh.

Anderson can feed infrequently because he uses whole grains exclusively in large, open hoppers (see picture, page 48), along with a 38-percent commercial

> **Of all the laborsaving devices invented for women, none has ever been so popular as a husband with plenty of money.** —*George Beecher*

protein concentrate. No one needs to be there at any certain hour to hand-feed the whole grain. It's in feeders, in front of the birds all the time.

Each feeder is divided into four equal parts—with whole corn in one part; whole, plump oats in another; whole wheat in the third; and protein concentrate in the remaining part. Enough of these are used so that, with all of them filled, the supply will last more than a day. Usually they are replenished once daily.

Anderson's White Leghorn hens seem to balance their ration themselves fairly accurately between these grains and the protein. They eat somewhat more wheat than they do corn and oats. If only oats and corn were used, without wheat, a concentrate with a lower protein content could be fed, because they would eat more concentrate in the absence of the third grain. With a greater volume, the percentage of protein per unit can be lower.

Whole grain feeding has another advantage, Anderson pointed out. It allows use of farm-raised feeds without the labor and time of grinding and mixing them.

When Anderson's young chicks arrive in the spring and have been put into a brooder house, he uses a commercial starting mash. Any good mash that the chicks relish and will eat readily is all right, he says.

From the time the chicks are a day old, they receive grit and a buttermilk whey which comes in the form of a thick paste. This buttermilk paste, Anderson believes, has ended his losses due to cannibalism. Perhaps the chicks pick at the buttermilk instead of at one another. At least, he has had no losses due to cannibalism since he began feeding it. Buttermilk paste is kept before the birds all the time—both when they are growing and after they have been transferred to the laying house in the fall.

Anderson's chicks, in their brooder house, are moved early to clean alfalfa range. When they are 9 to 10 weeks old,

[*Turn to page 164*

Gerald Breunig operates a 188-acre farm used exclusively to raise hogs. He markets about 600 per year and raises most of his own feed . . . corn, oats, and alfalfa. He pastures the hogs in various fields in rotation, requiring good fence to keep them under control.

He says this about his American Fence, "We've found that good pasture is the cheapest feed there is. And to get the best out of pastures, you need good fence. We've used U·S·S American for our permanent fences ever since this farm was made hog-tight. *That was 30 years ago, and some of those fences are still in use.*"

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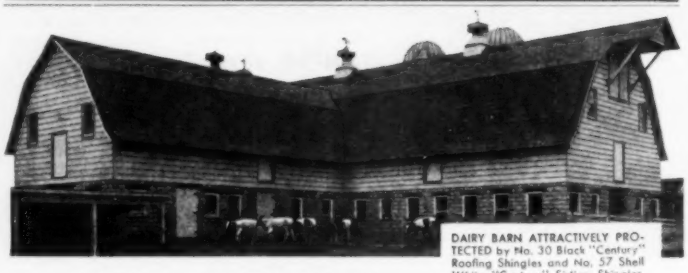

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More eggs, less work

[*From page 163*]

whole oats and whole wheat, in addition to the starting mash, are given in separate open feeders. When they are 12 weeks old, the chicks gradually are worked over to the 38-percent laying concentrate, and the starting mash is discontinued. Plenty of green feed is made available.

No corn is given while the birds are on range. They grow and are fat enough, but in the fall, when the pullets leave the range to occupy the laying house, whole corn is added to the ration. Oystershell or some other form of calcium also is given. Water is piped into laying house.

When more than one brooder house is used, Anderson tries to keep them scattered on the range instead of close together. The birds do better this way, he has found.

> **You can't plow a field by turning it over in your mind.**
> —*Buster Rothman*

Last year Anderson sampled a new method of brooding and growing pullets. The chicks were kept at the hatchery in a battery brooder until they were 5 weeks old. Then they were transferred to range on March 30, where they used a low, metal shelter, partly open on two sides and open entirely on one side. (See picture, page 48.)

The shelter has roosts and a "comfort" board. The "comfort" board is something of an imitation of the heating element the pullets have had available previously in the battery brooder, except that there is no heat in the range shelter. From force of habit, apparently, the pullets huddle together under the "comfort" board and supply their own heat. No piling or crowding occurred, Anderson reported. Losses were about the same as in the usual method of sheltering the young birds, and the pullets did well. This "open" shelter method of housing the 5-week-olds is one which might well be widely adopted by Midwestern poultrymen. From results to date, the management practice holds a good deal of promise.

When quizzed a little more about *his* plan of buying 5-weeks-old chicks, Anderson made this explanation:

"In our climate, I think it is advisable with this system to schedule the delivery of 5-weeks-old chicks so they can be put into the new kind of shelter not earlier than the third or fourth week in April. Either rye or alfalfa (I prefer alfalfa) generally has started by that time. Also the possibility of really severe weather then is slight.

"I tried it on March 30 last year to satisfy myself that it could be done that early, but it might not work as well every year. Therefore, except in areas with a longer season than we have in Minnesota, I favor a little later starting date than I used last spring.

"The main object of the new way of brooding is not so much to get early range as it is to get away from the trouble and expense of brooder stoves and litter. I believe, however, that it also gives us a hardier bird that can go out before warm weather and make use of whatever range there happens to be at the time."

Anderson prefers community nests because more nesting material can be used, and the hens spend less time fighting over space. As a result, fewer eggs are broken or soiled.

A laying room, 12 feet wide, has been built at one end of the Anderson poultry house, where the community nests are located. The nests are close to one another, instead of being scattered through the building. Before Anderson had the laying room, he had to go through the entire house gathering the eggs, disturbing the hens and scaring them off the nests. Now, he merely enters the nest room from the outside.

Furthermore, he quit frequent gathering of the eggs. In the cool parts of the year, this is done once a day. He has found that about 80 percent of the eggs are laid in the forenoon. So, by gathering at noon, he gets at that time nearly all of the eggs laid that day. He has to contend with a few more soiled eggs this way, but there are big advantages, according to his experience.

Ever since he went on the once-a-day egg-gathering schedule and moved the nests into a special room, Anderson's number of "blowouts" or "pickouts" in the hens has dropped sharply. This had been a serious problem causing considerable death loss. He feels the new plan is responsible for the improvements. Scaring hens from the nest while the vent is distended from laying is bad, he says, and he has eliminated much of this from his flock.

Better results are obtained, too, this poultryman believes, when nests are kept dark inside. This is not too difficult to do with community nests. The hens, in a darkened interior, do not scratch the nesting material out of place, and they pay closer attention to the important business of the moment.

"There must be places to sell good eggs on a grade basis for local consumption in many of our smaller Midwestern towns," Anderson said. "If I were not selling hatching eggs, I believe I could develop a special market with the stores in my town. The merchants say they would pay me extra for fresh, clean, dependable eggs. A market of this kind, however, must be served on a year-around basis.

"As it is, outside of the hatching season, I am selling my eggs on a grade basis at a creamery. Grading brings me $1 a case over the 'mill run' of eggs." **END**

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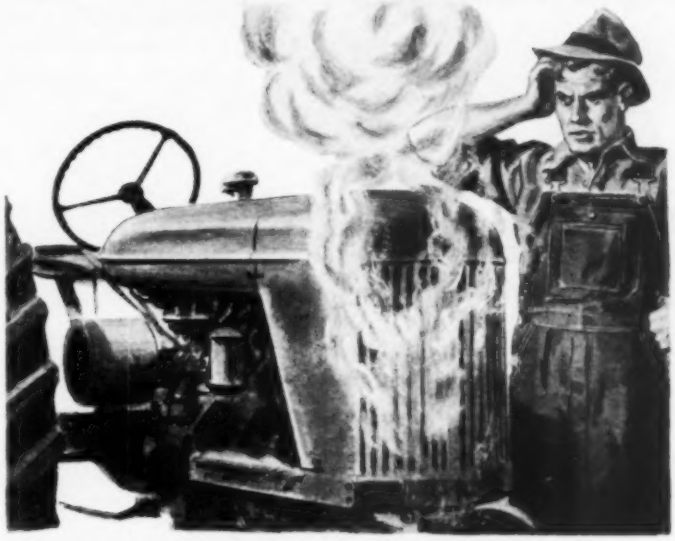

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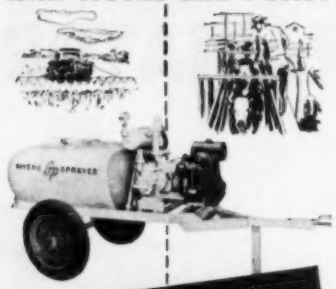

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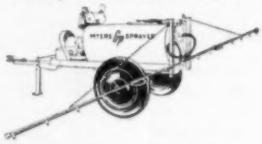

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This pig ration cuts feed costs

New, high-energy diets promise to revolutionize hog feeding in next few years. Idea came from poultry research

By W. N. McMillen
Michigan State College

Last July, pigs looked pretty rough-haired and unthrifty on the W. M. Van Page farm in Gratiot County, Michigan. By August, however, they were growing well and their hair looked slick. It was hard to believe that pigs could change so much.

Do I hear you say that Van Page must have fed B-vitamins to his pigs? No, he simply changed to a ration being tested at Michigan State College. In other words, he stopped feeding a protein supplement high in fiber (alfalfa meal) and switched to one made up of soybean meal, fed along with corn and a complex mineral mixture on pasture. The same thing happened on several other farms.

Yes, some big changes are in sight for the hog raiser. You're likely to cut your feed bill 25 percent and double the profit from swine feeding during the next few years. The amount of feed required to produce 100 pounds of pork is so high on a lot of farms today that a 25-percent saving in feed and a 100-percent increase in profit are real possibilities.

Take tip from poultry raisers. A few years ago it took nearly 4 pounds of feed to produce a pound of broiler. Rapid advances in poultry research have produced diets that are "high energy," or just plain "better balanced." The important thing is that now they produce a pound of broiler with about 3 pounds of feed.

Can we raise hogs to market weight with that degree of feed efficiency? It looks likely, for the job already is being done at experiment stations. We soon will have feed formulas that will greatly improve the efficiency of hog production.

Fast gains vs. economy. One would be foolish to say that fast gains are not important. In general, they are profitable. But there may be a point beyond which rapid gains are not desirable. This is certainly true from the standpoint of desirable, meaty carcasses. It is also undesirable to push young breeding hogs too fast.

The big point, however, is that we often talk and think so much about rapid gain and forget about economy of feed. Results of several experiments show from 1.6 to 1.8 pounds daily gain, with feed requirements up near 4 pounds of feed per pound of gain. We have all come to accept 4 pounds of feed per pound of gain as a sort of standard.

Now—a more efficient hog ration. Results of recent experiments using vitamins and combinations of highly digestible feeds are pointing to more efficient swine feeding. Fortunately for us, the backbone of "low-cost" swine rations is corn and soybean meal. Of course, other oil meals can be used to replace part of the soybean meal.

Dr. R. W. Luecke, Dr. F. Thorp, Jr., and I have completed two trials at the Michigan Experiment Station in which weanling pigs have been fed from 25 up to 185 pounds on concrete floors. For each pound of gain, one lot ate 2.95 pounds of feed and the other lot took 3.30 pounds.

Here's the formula. The feed mixture consisted of 77 parts corn, 20 parts soybean meal, and 3 parts complex mineral, plus liberal amounts of three B-vitamins

Turn to page 168

This uniform group of hogs ate only 3.46 pounds of feed per pound of gain. These efficient gains were made on rape pasture with corn, soybean meal, and minerals

Meet Woody Martin — Another Do-it-Yourself American!

Men like Woodford L. Martin live on every Main Street. For you'll find folks all over the country who also believe America still has new frontiers . . . and *prove* it by making their own security. How does this Do-It-Yourself Spirit pay off? You'll find one answer in the story of this former Savannah, Missouri, highway worker . . .

He built a business by putting new life in old land!

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When Woody Martin got back from the war, he saw the farms around his home county with new eyes. Acre after acre, water run-offs were ruining the land!

Martin talked with state soil conservation men, heard what they were doing. Then he had an idea! Why not make a *business* of putting new life in the land?

From small beginnings with one war-surplus tractor, Martin today at 33 heads a business that's well on the way to big success. For Martin saw an opportunity and had the energy and ambition to do something about it.

Woody Martin's "Do-It-Yourself Spirit" is shared by lots of other people in many other ways. For example, the 80 million Americans—4 out of 5 families who *voluntarily* use life insurance to take care of their *own* futures. And their number is growing every day.

So the life insurance business is making more benefits available to more people. It brings weekly and monthly-payment policies to folks of modest means; family income replacement plans to others. And group life insurance to millions of employees. Today there are 584 competing companies and 150,000 trained agents . . . helping Americans to help *themselves*.

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- First, it goes back to work on Main Street as investment money. It helps build and expand plants, build water works, extend power lines . . . it also helps finance homes, improve farms. It makes jobs in many ways.
- These insurance investments are spread throughout the country. You'll find them on farms, in small towns as well as in large cities, roughly in proportion to life insurance ownership.
- Second, life insurance money goes back to Main Street when paid to policyholders and beneficiaries. Then it helps keep families a going concern, keeps children in schools, gives older folks secure retirement years.

To make sure you are getting the greatest benefit from your own life insurance, see your agent. Life insurance is a *service!* Your agent is trained to help you make the most of it. The Institute of Life Insurance—central source of information—60 E. 42nd Street, New York 17, N. Y.

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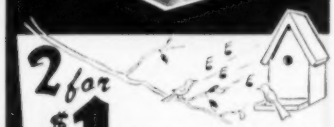

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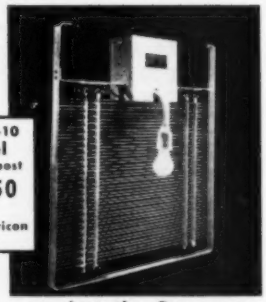

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Gardner Manufacturing Co.
840 Kansas Street Horicon, Wis.

This pig ration cuts feed costs

[*From page 166*]

and one of the new APF concentrates. The pigs made an average daily gain of 1.5 pounds, which is good for pigs of this weight.

When fed on pasture. A young, green pasture will go far toward supplying Vitamin A and the three B-vitamins when thrifty pigs are fed the corn-soybean meal-mineral type of ration. And although there is evidence that pasture does not contain APF, the pigs seem to get something that replaces it. This "something" may come from the soil, incubated manure, or some other source. Several groups of pigs have been successfully fed this type of ration on pasture.

When fed in dry lot. It's a different story when pigs are fed this corn-soybean meal-mineral ration in dry lot. Care must be taken to supply necessary levels of B-vitamins, minerals (including trace minerals), the animal protein factor or factors, and Vitamins A and D.

From results of several cooperative experiments with Doctor Luecke and Doctor Thorp at the Michigan station, we have found that necessary levels of the three B-vitamins—niacin, pantothenic acid, and riboflavin—for weanling pigs in dry lot are much higher than we used to think. We have decided that 15 mg. (milligrams) of niacin, 10 mg. pantothenic acid, and 2.5 mg. riboflavin should be added per pound of feed for weanling pigs in order to be safe. Unfortunately it is hard to get these high levels in mixtures of natural feedstuffs.

Synthetic B-vitamins are reasonable in price, and their addition to hog feeds will add little to the cost. These vitamins in powder form are available to the feed trade. Your feed men can put them into your feed or supplements for you. In fact, many feed companies are already putting them in the feed.

Use complex mineral mixtures. Very necessary in this new ration are the complex mineral mixtures. In many of our Michigan experiments we have used the following percentages of mineral ingredients: iodized salt, 30.6; bonemeal, 31.6; limestone, 31.6; ferrous sulfate, 2.1; magnesium carbonate, 3.0; copper sulfate, 0.2; potassium carbonate, 0.2; manganese sulfate, 0.5; zinc oxide, 0.1; and cobalt chloride, 0.1.

Three percent of this mixture was used in the rations. This mixture is not necessarily the best one. It is included here merely to give you an idea of the type of mineral mixture being used in test diets at several of the experiment stations and in many commercial feeds. Future experiments may prove that some of the trace minerals are not necessary. In the meantime, they will be included in swine feeds as a matter of insurance.

Vitamins A and D. Because alfalfa meal cannot be included in this new type of "highly digestible" diet at levels that always insure enough Vitamin A, it may be necessary to add some type of Vitamin A concentrate. This might be fish-liver oil or some other Vitamin A preparation. Most commercial swine feeds already include some inexpensive source of Vitamin D, like irradiated yeast.

Use of APF. Recent evidence indicates that B_{12} may be only one of two or more factors that produce the APF increase in growth rate on all-plant rations. Results of several experiments indicate that about 2 percent good fish solubles, 4 percent good fish meal, or 6 percent good meat scraps will supply the necessary amount of the animal protein factor or factors.

Some of the new APF concentrates show promise. There are new and better concentrates to come. These products are so new that several months will be required to test them in short- and long-time experiments to establish definitely their future role in swine feeding. As experiments progress, it probably will be established that other feeds can be added to the fortified corn-soybean meal type ration without lowering efficiency.

Cut fiber in suckling sows' diet. One of the best ways to get pigs off to an efficient start is to feed the sows a ration that will produce a lot of milk. There is not as much good evidence that the "low-fiber" or "high-energy" diets work as well for milk production as they do for growth. However, it is generally recommended that alfalfa meal be reduced to 5 percent for sows suckling pigs.

As larger amounts of alfalfa meal work fine in gestation rations, some hog raisers and feed companies apparently are making the mistake of including more than 5 percent alfalfa in the ration for suckling sows and in rations for small pigs. Although more research is needed, it begins to look as if the fibrous feeds should be kept at a minimum in lactation rations.

Creep-feed the high-energy ration. A lot of pigs become runty because they do not get feed early enough. By the time pigs are 3 weeks old, the sow's milk is not sufficient to keep the pigs growing at a normal rate. Then a palatable, highly digestible feed must be put in a creep, or the pigs should start eating the feed from feeders with their mothers.

We need more information on pig starters. Until we get these starters completely worked out, you can feed coarsely ground grains with some "highly digestible" or "low-fiber" supplement.

Much experimental work and testing on farms remains to be done before the final word is given on new-type, efficient swine rations. Enough is known already so that rapid changes are taking place in swine-feeding practice. If your present feeding program is working, you are foolish to make any rapid changes. But if your pigs are not growing as well as you would like, you might want to try this high-energy diet of corn, soybean meal, B-vitamins, complex minerals, APF, and Vitamins A and D.

It will be interesting to watch the changes in recommended swine-feeding practices the next few months. **END**

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The PLAY

Where Playfellows

Come to the Play House for all kinds of fun this month. You'll find tasty little chocolate Easter eggs that you can make yourself, a puzzle, a game, and lovable "Sally Glove Doll" whose easy directions appear on the opposite page.

Fun for little cooks

Easter Egg Brownies are "umm . . . good!" and not a bit hard to make. Try our recipe (Mother will be glad to help you, we know) and see if they don't melt in your mouth.

Combine in top of double boiler:
- **4 tablespoons butter**
- **½ cup water**

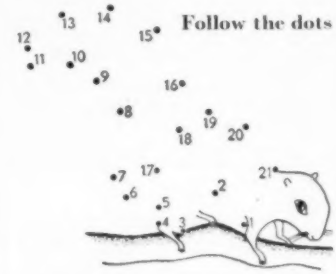
Cook until butter melts.
Add . . . . . **package of fudge mix**
Stir well until glossy (about 4 minutes).
Cool.
Stir in . . . **2½ cups coarse graham cracker crumbs**
Spoon mixture into well-buttered plastic egg trays or shape into ovals by hand.
Chill until firm.
Remove from mold and cut in half.
Spread halves generously with icing of
- **1 cup powdered sugar**
- **1½ tablespoons cream,**

smoothed into a creamy filling

Place halves together and decorate with leftover frosting to resemble Easter eggs.
Serve them as a special party treat.

Who is in this picture? One of your little spring woods friends is romping over the page below. But he is a shy little fellow and won't let you know him until you have filled in all of his dots. Here's what you do:

Follow the dots



Start your pencil at Dot No. 1 and you're on your way. Draw a line to Dot No. 2, then on to No. 3, and so on until you find the surprise picture finished completely when you reach the very last dot, No. 21. Recognize him?

HOUSE

meet every month

Ever go prospecting? This is a game that's always fun to play at Easter time. You'll need to color an Easter egg with yellow dye. Hard-boil it, too, for easy handling. Now, let the group select two members to be the "old prospectors" who are searching the mountains for gold. Everyone forms a circle, shoulder to shoulder, around them. Hand the "gold" (golden egg) to one of the players in the circle, and the game begins in earnest.

While piano, record, or radio music plays, the egg is passed rapidly from hand to hand, around and around the circle. The very instant the music stops, however, the egg must stop as well. The two prospectors point to the person holding the golden egg and cry, "You have the gold, but you're out in the cold." This player is eliminated and the egg comes back in circulation as the music continues. The player left holding the "gold," after all others have dropped out, is the winner. Try it.

"Sally Glove Doll" is made from a woman's glove. She stands 6½ inches tall. Draw the pattern for her head and

body on the glove, as shown in the left-hand drawing, above.

Cut out the body and blanket-stitch around the edges, leaving the bottom edge open. Stuff the body with cotton. Use a pencil to push the cotton firmly into the head and neck.

Cut off the first two fingers of the glove for the legs. Cut off the last two for the arms. Stuff the arms and legs with cotton and sew them to the body as in the right-hand drawing. Two tiny shirt buttons will make her eyes. Sew them in place and sew her nose, mouth, and eyebrows with colored embroidery floss (or paint them on with water colors). Add a simple hairdo of yarn. We gave her perky braids and bangs.

Now, cut a strip of cloth 7 inches by 3½ inches for her dress. Fold the cloth in half and cut a hole in the center for Sally's head. Trim around the skirt, sleeves, and neck edge with colorful rickrack. Slip the dress over Sally's head and tie at her waist with a ribbon sash. You can paint shoes on her, if you wish, or make them from a scrap of black fabric. **END**

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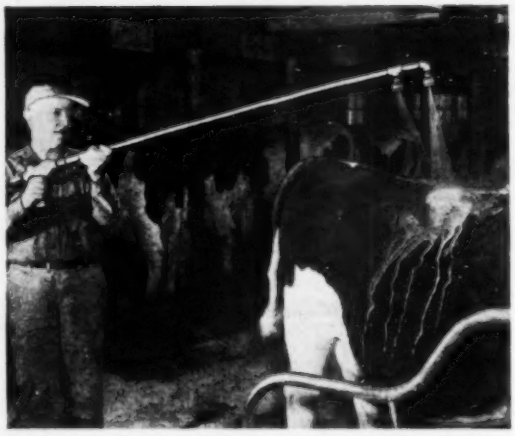
Where do we stand on livestock sprays?

New bug-killing discoveries come almost daily. The author here gives you the latest as to which are most effective for each kind of stock. Correct dosages and the possible dangers from misuse are also discussed

By H. H. Schwardt
Cornell University



For dairy cattle. Lindane is considered safe for use in dairy barns and is useful for such pests as flies, lice, mange. A spray rod with nozzles at right angles to the pipe seems best for dairy animals, is convenient

Heel flies are chasing my steers all over the farm; is there any way to stop them? Should I dip my ticky ewes before or after shearing? DDT doesn't seem to work against flies in my barn this summer; would you suggest chlordane, Lindane, methoxychlor, Toxaphene, or what?

Letters with questions like these make the extension entomologist dread to open his morning mail. Not that they are foolish questions—they are very practical questions. And they illustrate the variety of problems involved in the intelligent control of livestock insect pests.

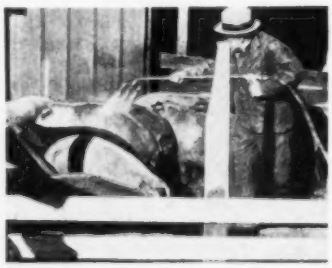
The matter was serious enough when we had only the parasites and a few standard—if not so good—remedies to worry about. But now we have a dozen common insecticides that were unknown eight years ago. Each is offered in three or four forms and, altogether, they are available under several hundred trade names.

Some of them are the answer to a livestock man's prayer, some are useless for certain pests, and several will kill an animal if an overdose is used. As an additional worry, some of the new materials can go through the hide of a dairy cow and get into her milk.

Let's take a look at the bugs that live on or in your animals and study what you can do about them:

If you are a beef man, you probably invest a lot of good cash in cattle grubs each year. Many fancy schemes have been tested to stop grubs before they get into a cow, but none has worked. No spray is known which will keep the flies completely away from cattle or kill the young grubs before they bore in. [*Turn to page 174*

For beef cattle. A wider variety of insecticides may be used than is advised for dairy cattle. Rotenone is a stand-by for grubs



For hogs. Lindane and chlordane are doing a good job on mange and lice. Follow manufacturer's directions; an overdose can kill

For sheep. Ticks can be controlled with rotenone, DDT, chlordane, Toxaphene, methoxychlor, others. Author prefers dip to spray

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Dearborn Spring Shank Cultivator, companion to the Rigid Shank Cultivator in large picture. Especially good in stony, root-filled or weedy soil.

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EXTRA LONG WEAR WITH COMFORT TO SPARE

CEDAR-CREST SHOE COMPANY
DIV. OF GENERAL SHOE CORPORATION
NASHVILLE, TENNESSEE

Where do we stand on livestock sprays?

[*From page 172*]

Your only chance is to kill the big grubs after they have come to the back and cut their breathing holes through the hide. None of the new insecticides will kill grubs as well as the old stand-by, rotenone.

Seven and one-half pounds of the 5-percent stuff make 100 gallons of spray, which will treat 200 cattle. It must be applied at around 400 pounds pressure with a nozzle that delivers a coarse, driving spray. The stream should strike the back at right angles, and the nozzle should be no more than 18 inches from the back.

Make the first application within a month after the first holes appear, and at least two others at monthly intervals. If you can't get the use of a sprayer, you can dust the grubs. Use a 1.5-percent rotenone powder sprinkled on generously and rubbed in with a stiff brush.

Cattle lice attract less attention than the big grubs but probably cause just as much damage because they come in thousands instead of dozens. Five kinds of lice occur on cattle in the United States. Happily, all can be killed with any one of a number of new insecticides.

In general, cattle louse control is more complete—and more permanent—if sprays instead of the usual dusts are used. Where the facilities are available, dipping is best of all.

One pound of 5-percent rotenone, 5 pounds of 40-percent chlordane wettable powder, 1 quart of 74-percent chlordane emulsifiable concentrate, 1½ pounds of 25-percent Lindane wettable powder, 8 pounds of 50-percent DDT or methoxychlor wettable powder, 1 gallon of 50-percent Toxaphene emulsifiable concentrate—any one of these amounts will make 100 gallons of louse-killing spray or dip.

Rotenone is by far the cheapest material and probably as good as any. Rotenone dust of ½-percent strength is effective, but dust is difficult to apply thoroughly. A louse is a very small insect and a surprising number of them can grow to maturity on a single square inch of a cow's hide. If a few square inches are missed during treatment, the seed for a new crop is planted.

Chlordane, Toxaphene, and DDT are not recommended for use on milking dairy cattle. They won't hurt the cattle if correctly used, but they all get into the milk in small amounts.

Cattle mange has flared up recently in some of the Northeastern states, and a survey in one of them indicated that about half the dairy animals were infested. Because cattle mange had been a rare ailment during the past decade, few dairymen recognized it in its early stages.

They called it barn itch and wrongly attributed it to lice, ringworm, and a variety of other common parasitisms. But when some of their animals developed a rough, wrinkled, scabby skin, lost most of their hair, and went out of production, they called veterinarians.

Examinations of skin scrapings showed that mange mites were the cause of the trouble. Mange mites are too small to see with the unaided eye and some kinds spend most of their lives under the skin.

Who says all Hog Cholera Vaccines are the same?

Hog Cholera VACCINES ARE Different

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1. Cutter Laboratories has pioneered the commercial production of tissue vaccine (BTV) and crystal violet (methylrosanilin chloride) vaccine.

2. Cutter Laboratories has commercially produced hog cholera vaccines for over 10 years.

3. Field usage of Cutter vaccines in millions of hogs has resulted in the steadily increasing demand by swine raisers and veterinarians for Cutter B. T. V.

Only Cutter makes B. T. V.

Write Cutter Laboratories, Berkeley, California for booklet describing in detail the prevention of hog cholera with B. T. V.

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To make a positive diagnosis, the veterinarian makes a deep skin scraping—deep enough to draw a little blood—and examines it with a microscope.

If mange is found in a single animal in a herd, all should be dipped or sprayed immediately. Lindane is one of the preferred materials, and the dosage is the same as for cattle lice—1½ pounds of 25-percent wettable powder in 100 gallons of water. Chlordane also is an excellent mange killer but cannot be used on dairy cattle. With either material two applications, a week apart, must be made.

High pressure and thorough coverage are absolutely essential for successful mange spraying. Several seasons of testing at Cornell University indicate that a nozzle pressure of at least 300 pounds is desirable, and that 2 gallons of spray are required for good coverage of the average dairy cow.

The spray rod with nozzles at right angles to the pipe (see top picture, page 172) has been found the best type for spraying dairy animals. Dairy herds are most conveniently sprayed while confined in their stanchions, with the operator working both in front of and behind the stanchions.

Automatic spraying machines for cattle are on the market and have been used successfully on beef cattle. These consist of a portable, sheet-iron stall equipped with nozzles to direct the spray toward all parts of the animal's body. The machines have integral spray pumps and supply tanks. Dairy cattle are difficult to get into these machines and do not easily tolerate the rough handling required. It is easier to spray them in the stanchions.

Winter spraying of dairy cattle is safe if the animals are in warm barns. More than 100,000 New York dairy cattle were sprayed during the winter of 1948-49 without a single illness or fatality for which the spraying could be blamed.

The horn fly is best known for its habit of clustering about the bases of the horns of cattle. But most of its time is spent sucking blood. This habit of remaining on its host makes the horn fly easy to control. It soon picks up a big dose of any insecticide sprayed on the cow.

All the materials mentioned under louse control will take care of the horn fly, and you need not spray the entire animal. A good application on backs and sides will do. Because of milk residue hazards, only methoxychlor should be used on dairy cattle. Test figures show that horn fly control really pays off in increased beef on the carcass.

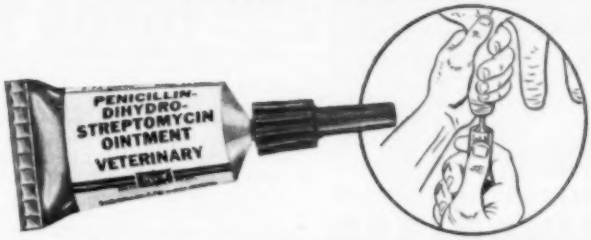
And hogs, as well as cattle, suffer from insect pests. Hog mange can ruin a hog enterprise in no time. Either Lindane or chlordane sprays or dips at the dosages recommended for cattle louse control will cure hog mange. One treatment usually is sufficient. In severe cases it is best to double these dosages or spray or dip twice. The same materials also kill hog lice.

Little need be said about the sheep tick because you can get rid of it completely, using dips containing rotenone, DDT, chlordane, Toxaphene, methoxychlor, or any of a number of other materials. Rotenone is a standout for this job because ½ pound of 5-percent stuff will make 100 gallons of dip costing about 25 cents. Late spring is the best time to dip

{ Turn to page 176

NEW! MASTITIS CONTROL

Combined antibiotic attack against multiple-infection mastitis



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- Will not harm the animal or discolor milk
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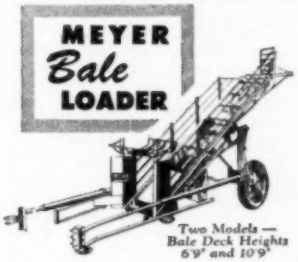
MEYER Bale LOADER



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Where do we stand on livestock sprays?

[*From page 175*]

small farm flocks. Sheep have fewest ticks just after shearing and take less material out of the vat at this time—but wait two weeks or so for shear cuts to heal.

If you live in an area where scattered small flocks are the rule, your community can profit by building a portable vat. Plans are available from the Department of Entomology at Cornell University, Ithaca, New York. Don't put too much faith in spraying for sheep tick control. Results have been erratic.

There has been much talk about houseflies that laugh at DDT. In some sections of the country you can spray a barn several times a summer with high concentrations of DDT and still have many flies.

Apparently, we always had a few extra-hardy flies that never were killed by DDT. After several seasons of spraying, the weaklings have been killed off and the hardy flies have multiplied.

Chlordane or Lindane will kill these tough flies, but chlordane should not be used in dairy barns. These materials last longer on a barn wall if the emulsifiable concentrate form is used. Six pints of 74-percent chlordane emulsifiable concentrate or 1 gallon of 25-percent Lindane are the amounts commonly used to make 100 gallons of spray.

DDT still works in some sections but its use in dairy barns is not sanctioned by the U. S. Food and Drug Administration. Incredible as it may seem, small amounts of DDT do get into milk when barns are sprayed with the stuff. Small amounts of DDT, if taken into the body for long periods, may accumulate to toxic levels in organs such as the liver and kidneys.

Lindane also gets into milk in minute amounts but it does not accumulate in the body. Therefore, it is considered safe. Covering feed troughs and fountains while spraying will practically eliminate milk residues.

Lindane, chlordane, or Toxaphene can kill animals if excessive dosages are used in sprays or dips. Young calves are especially susceptible.

It is very important that recommended dosages not be exceeded. If only twice the amounts mentioned in the paragraph on louse control are used, some danger is involved. If four times these dosages are used, some animals may be killed.

DDT and methoxychlor are safe at dosages as high as 80 pounds of 50-percent wettable powder in 100 gallons.

Straight oil solutions of any of the new insecticides are highly dangerous to livestock and must not be used as dips, or as sprays applied in large amounts to the entire animal. The repellent sprays used in light mist applications are oil solutions but are never recommended for application at rates above a fluid ounce or two on each animal.

It doesn't pay to experiment with any of the new insecticides or use them for purposes not mentioned on their labels. The recently developed organic phosphate insecticides can be rapidly fatal if sprayed on livestock or human beings.

Parathion and TEP, the two common representatives of this group of materials, have an important place in fruit spraying, but they are not for livestock. END

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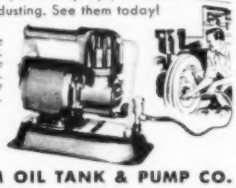

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Expect frozen milk to help dairy farmer

Virtual elimination of the milk shortage-surplus problem and the chance to sell more milk to consumers and at reduced prices are anticipated by officials of two large food processing companies. All of these advantages are expected to result from development of frozen, concentrated milk.

Pointing to what canned, frozen fruit juice has done to lift the citrus fruit industry out of the surplus doldrums, these food company executives expect a somewhat parallel situation for milk within the next few years. While milk distribution costs might not be cut so drastically as in the case of orange juice, these officials still feel that some savings could be effected which, in turn, could be passed on to the consumer.

The problem is to concentrate milk at low temperatures to 50, 60, and 75 percent and still retain the natural flavor of fresh milk when reconstituted by the housewife.

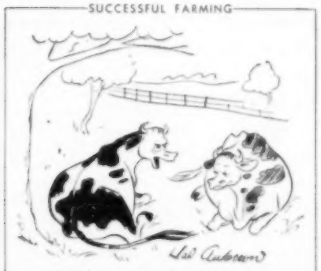
Not all leaders in the dairy industry take such an optimistic view of this new development. Owen Richards, general manager of the American Dairy Association, believes that this process, if perfected, will help, just as condensed milk and dried milk did their part toward putting more milk into the hands of consumers. However, Richards believes that it's the fresh product which encourages people to drink more whole milk. As far as stimulating more sales through a lower price is concerned, Richards believes that people will consume good fresh milk, regardless of price.

The American Dairy Association is cooperating with the Refrigeration Research Council on a project to explore "to the nth degree" the limitations as well as the possibilities of frozen, concentrated milk.

Another dairy leader suggests that cost of containers and the need for extensive storage space would tend to keep frozen concentrated milk from reaching the degree of use expected by some of the more optimistic parties.

Certain other food industries now are considering what a frozen, concentrated product might do to relieve their surpluses and solve their problems. Experiments already are under way. **END**

SUCCESSFUL FARMING



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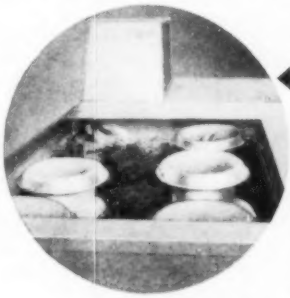

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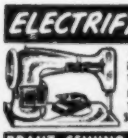

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How to sew plastics

You'll find a houseful of uses for the new, easy-to-stitch, easy-to-care-for plastic materials available

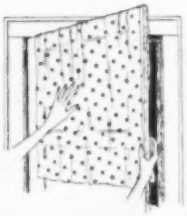
To make apron, see steps below

Draperies, slipcovers, raincoats, place mats, and aprons are only the beginning of a parade of ideas you can fashion from plastics. Imagine colorful, chintz-like prints; delicate eyelet embroidery; checks, polka dots, and gay floral patterns that can be cleaned with the flick of a damp cloth. They are waterproof, resist mildew and stain, and involve no ironing.

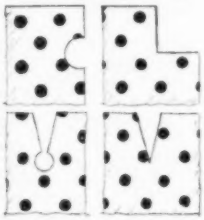
You needn't be an expert, either, to be a whiz at sewing plastics. They're simple to work with—no threads to ravel, no grain to straighten in cutting, no seams to bind. For top results, however, there are a few quick tricks. For instance, slightly loosen the tension on your machine as you start to sew, and set the gauge for a long, open stitch. (Short stitches pucker.) Add a fine, sharp needle (Size 11 is good), mercerized or nylon thread, and you're all set.

The perky dot apron above will be a smart starter. Follow the drawings below for helpful short cuts in making it. Gather a piece of light plastic, 18x24 inches, across one length. Adjust fullness to waist and add matching waistband. Fold lower edge of apron over 2-inch ruffle of contrasting color, and stitch. Big, round, dot pocket is cut from a double thickness of ruffle color and sewed three-quarters of the way around.

By Rhoda Snedecor

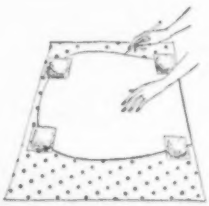


Smooth folds easily by hanging film over door or shower rod. Balance ends evenly and work wrinkles out with palm of the hand



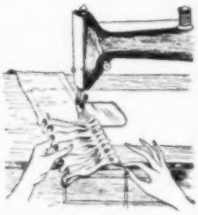
Round corners or darts in cutting, as in diagrams at left above. Square or pointed indentations (right) will tear when under a strain

Finish edges in a jiffy by pinking, leaving plain (plastic doesn't ravel), or adding binding of plastic tape. Sash end shown above

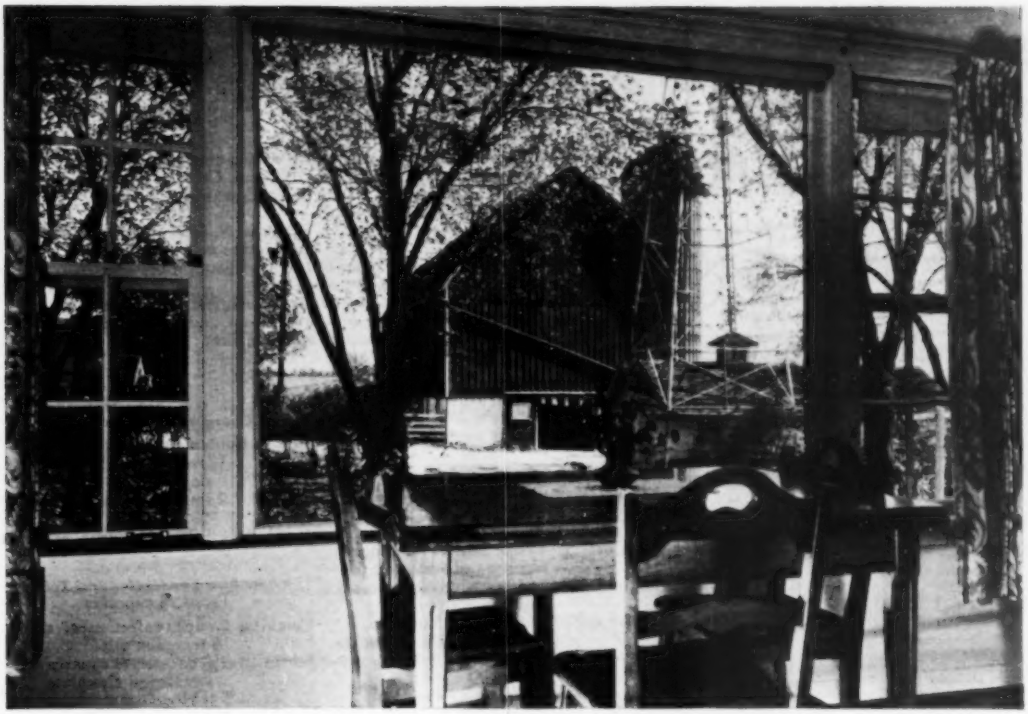


Hold the pattern in place with beanbags or other soft weights (pins tear film). Outline pattern edge and marks with soft lead pencil

Warm weather may make film a bit stretchy. If so, whisk a bit of talcum along sewing edge. If it's stiff in winter, rub with drop of oil



Loosen tension for ruffles. Stitch double row 1/4" apart, starting 1/2" from edge. Hold underthreads; gently slide film to fullness. **END**



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And—there's no "low-comfort zone" next to windows of *Thermopane*. Its sealed-in blanket of dry air keeps the inner pane near room temperature . . . eliminates the chilly drafts you feel near single-glass windows. With *Thermopane*, your entire room stays warmer in winter. Cooler in summer, too. For *Thermopane* stays in the year 'round . . . saves you all the work and bother of storm sash.

In new or remodeled homes, *Thermopane* provides the built-in insulation large glass areas should have in cold climates. It's the *best* way to insulate double-hung and casement as well as picture windows. For building economy, it is made in over 80 standard sizes, available through glass and building supply distributors and dealers. For complete information, write for our *Thermopane* book. *®

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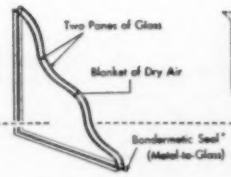

Thermopane

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TRY THIS *Quick*

***Again,* here is your**
Clabber Girl MASTER-MIX recipe

6 cups sifted all-purpose flour
2 tablespoons Clabber Girl Baking Powder
1½ teaspoon salt
1 cup shortening

Sift flour, baking powder and salt together Cut in shortening. Store in covered container in refrigerator. ***Now for . . . .***

GINGERBREAD UPSIDEDOWN CAKE
Here is your recipe . . .

1 tablespoon butter or margarine
¼ cup brown sugar
4 slices canned pineapple, drained
2 cups Clabber Girl Master-Mix
½ cup sugar
1 teaspoon ginger — *1 egg, well beaten*
1 teaspoon cinnamon — *½ cup molasses*
¼ teaspoon cloves — *½ cup water*

Melt butter or margarine in an 8" x 8" x 2" cake pan. Sprinkle with brown sugar Cut pineapple slices in halves and arrange on top of the sugar Measure Master-Mix into mixing bowl. Stir in sugar and spices. Combine egg, molasses and water Add gradually to dry mixture, stirring until well blended. Pour over fruit in pan and spread evenly. Bake at 350° F (moderate oven) 35 to 40 minutes. Remove from oven and cool two or three minutes. Turn out on serving plate, fruit side up. Serve warm topped with whipped cream or hard sauce. Makes 6 to 8 servings. To make plain Gingerbread, use the same recipe, but omit first three ingredients.

A Jar of Clabber Girl Master-Mix in the refrigerator helps quickly to bake waffles, gingerbreads, quickrolls, cookies, and other interesting and exciting home-baked products.

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The BAKING POWDER with
The *Balanced* Double Action
HULMAN AND COMPANY · TERRE HAUTE, IND.

Help for Home Planners. For help with your home planning, furnishing and decorating problems, visit one of the stores cooperating with Successful Farming's home planning service. You'll find a store near you listed on page 75.

Quickies with cream

Take advantage of the wonderful, rich cream that's always fresh and available on your farm. Use it as a substitute for shortening. Cream isn't as fattening as shortening and it's far easier to use.

Cream offers variety, too. For instance, it is simple to change the Golden Cream Cake recipe below. By just adding or subtracting one or two ingredients, it becomes a yummy spice or chocolate cake.

The Sweet Cream Biscuits take no shortening at all. It requires only a minute to whip them up, and just a flick of the wrist to drop them on a baking sheet.

Sweet Cream Biscuits

Makes 16 medium

Sift together:
2 cups flour
2 teaspoons baking powder
½ teaspoon salt
1 teaspoon sugar
Stir in . . . . **1¼ cups heavy cream** until mixture just sticks together
Drop batter from teaspoon onto greased baking sheet.
Bake at 400° (hot) 12 to 15 minutes.
—*Mrs. Carl L. Julig, Minnesota*

Oatmeal-Nut Drop Cookies

Makes 36

Sift together:
1 cup sifted flour
1 teaspoon baking powder
¼ teaspoon soda
¼ teaspoon salt
¼ teaspoon nutmeg
¼ teaspoon allspice
Add . . . . . **⅔ cup brown sugar**
¾ cup rolled oats
Combine ½ cup sour cream
1 well-beaten egg
Add cream mixture to dry ingredients.
Mix just until dry ingredients are all moistened.
Stir in . . . **½ cup chopped nuts**
Drop from teaspoon onto ungreased cooky sheets.
Bake at 425° (hot oven) 8 to 10 minutes.

Golden Cream Cake

Serves 8 to 10

Beat . . . . **2 eggs** well
Add gradually
1 cup sugar
Beat in . . . **1 cup heavy cream**
¼ teaspoon salt
1 teaspoon vanilla
Sift into egg mixture
2 cups sifted cake flour
2 teaspoons baking powder
Beat 1 minute.
Pour into greased, 8-inch-square cake pan.
Bake at 375° (moderately hot oven) 30 minutes.

Variations:

Spice Cream Cake

Add to egg mixture when adding flour:
2 teaspoons cinnamon
¼ teaspoon cloves
¼ teaspoon allspice.

Chocolate Cream Cake

Add to **Golden Cake batter:**
½ teaspoon soda (add to flour)
2 squares chocolate, melted (add last).
—*Mrs. Carl Julig, Minnesota*

Chocolate Confectioners' Icing

Frosts 18 cupcakes

Combine 2 cups confectioners' sugar
⅛ teaspoon salt
Stir in . . . . **1½ one-ounce squares unsweetened chocolate**
3 tablespoons warm cream
½ teaspoon vanilla
Beat until icing is of spreading consistency.
Add a few drops of water, if necessary.

Cream Piecrust

Makes single 9-inch crust

Sift together:
1¼ cups sifted flour
½ teaspoon baking powder
½ teaspoon salt
Blend in ½ cup heavy sweet cream
Add . . . . . **1 tablespoon cold water**
Mix lightly until dough just holds together.
Roll out on lightly floured board.
Line 9-inch piepan.
Bake at 450° (hot) for 10 minutes.
Mrs. Carl Julig, Minnesota.

Spicy Apple Dumplings

Makes 4

Follow recipe for **Cream Piecrust**
Roll out pastry to ¼-inch thickness on lightly floured board.
Cut into four 5-inch squares.
Center . . . **1 peeled, cored apple** on each square
Sprinkle with **sugar, cinnamon,** and **nutmeg**
Dot with **butter**
Fold corners to center; pinch edges together.
Place in greased baking pan.
Bring to boil:
1½ cups sugar
1½ cups water
¼ teaspoon nutmeg
⅛ teaspoon cinnamon
Boil 3 minutes.
Add . . . . . **3 tablespoons butter**
Pour syrup over dumplings
Bake at 375° (moderate) 35 minutes.
Serve with rich cream.

[*Turn to page 182*

Today's greatest refrigerator value—

A BRAND-NEW 2-DOOR G-E AT A NEW, LOW PRICE!

Model NJ-8G illustrated

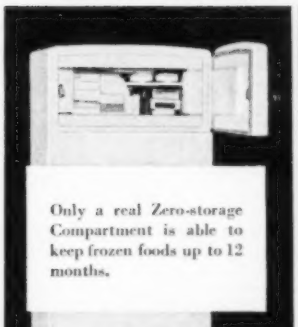
A Separate Refrigerator,
A Separate Home Freezer
In One Wonderful Cabinet!

NOW YOU CAN GET a famous two-door General Electric at a price near that of a de luxe standard refrigerator!

Actually—it's two wonderful appliances in one. The upper compartment is a real zero-degree Home Freezer, the lower compartment is a de luxe refrigerator. Each compartment performs its own special duty. Each compartment is separately refrigerated and insulated—each compartment has its individual door.

EXCLUSIVE! *New, "Redi-cube" ice trays!* One motion of the wrist releases *all* ice cubes at once... yet you can lift out *one* or several, as you choose, *without disturbing the others!* Never before such ease, such convenience!

ZERO COLD HERE ↓ **NO DEFROSTING HERE** ↓



NOW AVAILABLE! *FOUR* great Refrigerator-Home Freezer Combinations. *No defrosting necessary in fresh-food compartments!* Uncovered foods *don't* dry out! Deep fruit and vegetable drawers!

Most important of all—G-E dependability!

THIS DOUBLE-DUTY servant is blessed with the famed G-E sealed refrigerating system—the mechanism that ticks off years of dependable performance.

More than 2,200,000 G. E.'s have been in service ten years or longer! Many as long as fifteen, or twenty years or more!

Divide dollars by years and years of dependability—and you'll know why you should see your General Electric retailer today! General Electric Company, Bridgeport 2, Connecticut.

More than 2,200,000 G-E Refrigerators in use 10 years or longer.

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IDA BAILEY ALLEN,

world-famous cookery expert, says: "It takes more than practice to be a prize-winning cook"

Author of 48 popular cookbooks and well-known radio and television personality, Ida Bailey Allen says, "In cooking—it takes the best to make the best. When you bake at home, for instance, you'll get good results only if you use a good, lively yeast. I just know you'll like Fleischmann's. It's got plenty of 'pep and go'—it won't ever let you down."

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Every farm home needs a well-planned workroom for such typically farm jobs as chicken cleaning, canning, heavy laundering, cream separating. Successful Farming's Building Book will show you how to build a labor-saving workroom into your home. There are hundreds of good, sound, remodeling and building ideas in this outstanding book. Get your copy today by writing to 3204 Meredith Building, Des Moines 3, Iowa. Price, only 50c.

Quickies with cream

[*From page 180*]

Caramel Fudge Frosting

Frosts 2 layers or one 8-inch-square cake

Combine **1½ cups brown sugar**
1½ cups sugar
1 cup cream
Cook until mixture reaches soft-ball stage (234° on candy thermometer).
Remove from heat.
Cool without stirring until lukewarm.
Add ..... **1 teaspoon vanilla**
⅛ teaspoon salt
Beat until thick and creamy.
Spread quickly on cake.

Date Muffins

Makes 12

Sift together:
2 cups sifted flour
3 teaspoons baking powder
½ teaspoon salt
2 tablespoons sugar
Add ..... **½ cup chopped dates**
Combine **1 cup heavy cream**
1 well-beaten egg
Add cream mixture to dry ingredients.
Mix only until flour is dampened.
Fill greased muffin tins ⅔ full.
Bake at 425° (hot oven) 20 minutes. END

Send us your recipes

Do you have a recipe to submit for testing in our kitchen? *Successful Farming* pays $5 for each recipe published on the Successful Recipes pages. Please write on only one side of the paper. We cannot return unused recipes.—Editors

A bulletin board will save you steps

Ever have trouble remembering what you had planned for tomorrow night's supper? Or do you sometimes like to leave notes for the family where you'll be sure they'll see them? A bulletin board in your kitchen is the answer.

You'll find the board will serve a great number of purposes. The children soon will learn to use it to display their latest artistic efforts. Shopping lists and last-minute reminders will seldom be lost if there's a bulletin board handy.

Build the board in no time at all from wallboard and a frame of 1x2-inch wood. Build the frame first, then cut the wallboard to fit inside. Secure it in position with glazier's points on both front and back. Paint the whole thing to match your kitchen walls. Hang it, and you'll be amazed at how often you'll use it.

Smartly styled for large figures

[*From page 36*]

illusion. These few easy rules can work wardrobe wonders. The most important principle, experts agree, is to focus eye-attention *away* from all bulges—a soft side drape on the skirt does this—or to disguise them with continuous "down" lines which slenderize—a straight front panel does this, you'll find. Avoid the pitfall of frilliness. Simplicity is the watchword to remember always.

Here are some of the basic clothes-tricks which help hide figure faults. Take advantage of these to dress fashion-wise on every occasion.

• Smartly tailored clothes are best. Ruffles and frills, lace and fancy trimming tend to call attention to your size.

• Narrow belts made from the dress fabric are wonderfully inconspicuous. A wide belt, or belts of contrasting material, tend to draw eyes magnetically waistward. They disrupt the pleasant up and down line. Buckle-wise, boycott the flashy ornamental variety. These act as a beacon that attracts interest to a spot which might be best overlooked.

• Plaid, bold designs, splashy floral prints, though fine when the dress is on the hanger, sound a "solid" note when they're on the heavy figure. They don't disguise—they emphasize, and make a woman look sizes larger. On the other hand, tiny prints, plain colors (hunter green, black, navy, royal blue, cocoa brown, light greens, gray-blue, and gold) are excellent. They're trimming, becoming, and always in good taste.

• Sleeveless garments are not for the full figure. Below-the-elbow sleeves give a perfect disguise for fleshy arms. Three-quarter length, as a matter of fact, is not only excellent for large sizes, but in high fashion favor for all, this season.

• A bit of soft fullness adds grace where it is needed. Softness over the bust and just below the hips is what the experts prescribe. Garments never should be snug, yet certainly the "sack" look is equally unbecoming.

• Skirt length is very important. Skimping on length only accents one's size. Slightly longer skirts are as slenderizing as they are flattering. They help carry out the "down" look by lengthening lines and trimming one's whole appearance. Also, extra skirt length is a "must" for good balance and proportion in suits.

• Add neck interest—a white, detachable collar on dark basic dress does wonders by drawing attention from the figure toward the face. A graceful turn-back collar and a gentle V-neckline are equally becoming. The V creates a feeling of length at the neck and is a good transition line to the rest of the garment. High or rounded necklines only accentuate a plump neck and a well-rounded face. Check them off as unflattering.

• "Up" is the word for hats. Wear hats that reach instead of cut you off pancake-like. Watch extra width and weight. Look for slimming features—upsweep brims, perky feathers, high crowns. END

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VEL* reduces bacteria counts...

Cleans milking equipment cleaner...faster...easier!

"No more high bacteria counts," says Mrs. Fordyce, "since we switched to VEL!"

"... and Vel cleans so much faster...saves me so much brushing. I won't clean our milking equipment with *anything* but Vel," added Mrs. Thelma Fordyce of Borden, Indiana, who farms 100 acres, milks 12 cows.

Be a quality producer... USE VEL!

It's impossible for bacteria to multiply or live in milking equipment that's cleaned regularly with Vel. Vel cleans so thoroughly it leaves no food for bacteria. That's been proved by one of the most prominent independent laboratories in the dairy industry! And Vel cleans so much faster! Easier! Vel flushes out milk fat and slime... cuts brushing to the minimum! For *cleaner* milking equipment – in a fraction of the time – use Vel!

Soapless suds recommended by many agricultural schools

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1. Right after milking, run solution of hot water and Vel (1 tablespoonful per gal.) through unit, while shaking it. Then brush the milker head and hoses.
2. Remove head and sealing rubber and brush them with Vel solution. Replace parts; suck through a pailful of boiling water or sterilizing solution.
3. Dismantle and leave parts to dry. Just before next milking, reassemble machine; suck through boiling water or sterilizing agent.

*Vel is the trade-mark of the Colgate-Palmolive-Peet Company.

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***IMPORTANT:* Do not soak eggs. In all, eggs should be in the hot water no more than 10 to 15 seconds.**

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Animal hunger that's hidden

Lack of minerals, vitamins, protein, or iodine can do strange things. The effects often are easy to see, but causes are harder to find. Author cites actual cases

By Dr. J. W. Bailey
Veterinarian

In recent years we've been hearing a great deal about "hidden hunger" or "borderline starvation" of farm animals. The experts say there are about four causes, so maybe a few examples will help to show how they promote trouble.

Cow went down. Not so long ago we were called to see a Wisconsin cow that had "gone down" and was unable to get up. She had been milking about a month and was in very poor physical condition. Examination showed that she did not have milk fever or acetonemia or any other discernible trouble that would keep her from getting on her feet. Though all the other cows in the herd were equally thin, none was similarly affected.

A clue to the possible trouble came when one of these other animals was seen eating dirt in the barnyard. Salt was available in a nearby box, so this struck us as rather strange. However, the farm was located in an area which we had long suspected of being deficient in cobalt and possibly other trace elements.

Gave her cobalt, iron. The "downer" was put on a cobalt and iron tonic. Free-choice trace-mineralized salt was recommended for the entire herd. In less than two days the sick cow was back on her feet and eating well again. The owner reported that all the cows were ravenously hungry for the new type of salt. More encouraging was a gradual but steady increase in milk production.

Hit newly fresh cows. A few years ago we observed a similar case in New York. The Eastern owner had been having trouble with all of his cows shortly after they freshened. The herd was well fed and in splendid condition. However, after difficulty with the umpteenth cow, professional help was sought for pinning down the cause.

This farm also lay in an area suspected of being deficient in trace minerals. At the first glance it seemed strange that only recently fresh cows should be affected. However, it was reasoned that the entire herd was on the very edge of trouble due to trace element deficiency. Fresh cows required extra amounts in a hurry, and they just weren't available,

either in feed or body reserves. Consequently, milk production dropped, and the cows became sick.

The results following the provision of trace mineral mixtures indicated that "hidden hunger" had existed here. Fresh cow troubles ended abruptly. Previously affected animals increased in milk production, and the whole herd seemed to be in better health.

Baby pigs need trace minerals. Cattle aren't the only animals that suffer from trace element deficiencies, either. Early last spring we went out to see some baby pigs that weren't doing very well. The sows were well fed and were giving plenty of milk for their litters. The babies were kept in out of the cold, the concrete floors were cleaned daily, and plenty of clean straw bedding was supplied.

A glance was all that was needed to show that the pigs had anemia. Keeping them in off the ground had robbed them of the chance to get any copper or iron, since milk contains none of these minerals. Daily painting of the sow's breasts with a liquid copper and iron compound ended pig troubles fast on this farm.

How copper helps pigs. Copper may have other beneficial results in swine raising, too. Recent work at the Hormel Institute at Austin, Minnesota, indicates that as little as four ounces of copper to the ton of feed may speed gains in the fattening lot. The same sort of feed for pregnant sows resulted in more live pigs per litter than were farrowed by sows not getting the copper.

When cattle chew bones. Nor are trace elements the only ones concerned with hidden hunger. We still remember the range cow that we found thrashing around on the ground. We finally discovered that she was choking on a weather-beaten old rib from some ancient skeleton. We had previously thought nothing of seeing cows chew on bones they had picked up, but the sight of this one was enough to convince us that the range cattle lacked something in their diet.

The bone-chewing business came to an end when calcium and phosphorus were supplied by putting out a mixture of wood ashes, steamed bonemeal, and finely ground limestone.

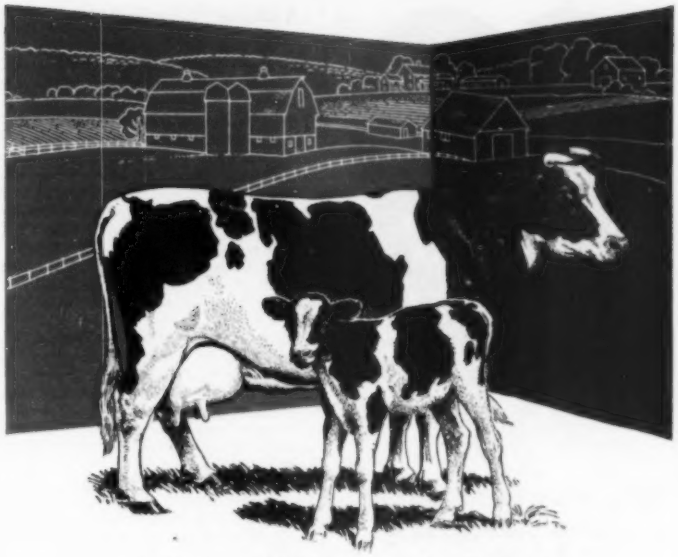
Rickets to blame. The eating of bones, wood, and dirt may be the first sign that livestock are short of needed minerals. However, there are other signs, too.

Quite often we see calves, with slightly swollen joints, that are inclined to stand too much on their toes. Those are the symptoms of rickets starting because of calcium, phosphorus, or Vitamin D deficiencies in their rations.

Older animals may look perfectly healthy and still be suffering from the same sort of deficiencies which cause their bones to become weak and soft. Invariably there comes a day when the owner is disagreeably surprised. His sows may suddenly become paralyzed in their hindquarters or cows may break their legs with slight tumbles or twists. Calves may even demonstrate calcium deficiency in a more dramatic way.

Calves had fits. We first saw it in a bunch of calves that were being weaned very young and switched over onto a

[*Turn to page 186*



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In addition to udder infusions of AUREOMYCIN Hydrochloride OINTMENT *Lederle*, cows suffering from acute, septic mastitis should be treated with SULMET Sulfamethazine, by injection or by mouth.

SULMET Sulfamethazine is available in several forms to suit your need: POWDER, TABLETS, OBLETS*, SOLUTION INJECTABLE Veterinary (available by or on a veterinarian's prescription) EMULSION, SOLUTION 12.5% (for use as a drench).

For maximum efficiency in the use of SULMET, as well as for best management practices and disease-control procedures, consult your veterinarian.

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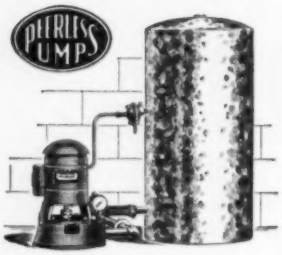

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Animal hunger

[*From page 185*]

commercial mixture to save high-priced milk.

All at once the calves started having fits. Sometimes they would run wildly around their pens until they dropped from exhaustion. At other times their muscles jerked and they frothed at the mouth in an alarming fashion. Occasionally there were attacks of convulsions with no other symptoms. Death always resulted after two or three such attacks.

The trouble stopped with the addition of calcium gluconate to the ration.

Could be protein shortage. The symptoms of protein deficiency are discouraging rather than spectacular. For years now we have been reading about balanced rations and scientific feeding. We know pretty well that our cows won't milk well unless enough protein is provided in their rations.

Too often we forget about the importance of protein to pregnant animals in the days before they start to produce milk. This is particularly true of brood sows.

With all this excitement over baby pig diseases, we sometimes wonder if a great deal of such trouble doesn't trace back to feeding of the pregnant sows. We have long known that legume hay or pasture is important for "expecting" sows. Such feeds aid in supplying necessary kinds and amounts of protein and vitamins needed for healthy litters.

Cause abnormal pigs. Recent tests at Purdue University showed that abnormal pigs most commonly came from sows that had received poor rations. They also showed the heaviest losses of baby pigs occurred in lots where the sows received neither green feeds nor animal proteins from gilthood to farrowing time. These neglected sows had the smallest litters and lost 60 percent of their pigs before weaning time.

Ewes have pregnancy disease. Protein shortages may affect animals other than cattle and swine, too. Every spring we get a few calls to look at ewes that are suffering from so-called "pregnancy disease." Affected animals always are either down or very stiff in the few movements they can still make. Under the best of conditions, only about 50 percent of the suffering beasts can be saved.

Probably nearly all of those cases are directly caused by low-protein feeds or poorly balanced rations. As with sows, skimping on protein for pregnant ewes may prove to be a pretty expensive way to cut costs.

Calves died, lacked vitamins. Last winter we saw a large-scale example of vitamin deficiency trouble in a Wisconsin dairy herd. At the time of our first call, 9 consecutive calves had been lost. Six had died in less than 24 hours after birth, 2 had died two days later, and the sixth had lived less than 70 hours. It was puzzling to the owner because all calves had been born strong and healthy.

The calf losses stopped promptly with the feeding of Vitamin A to the remaining pregnant cows. The same sort of thing is probably involved in outbreaks of these so-called "three-day scours" in baby pigs.

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New, 9-foot auger is spring-balanced to lift up for wagon to drive through. New forged-steel clutch, with auger speed ⅓ that of blower, assures positive feeding. A touch of the Safety Clutch stops auger.

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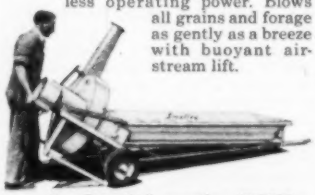

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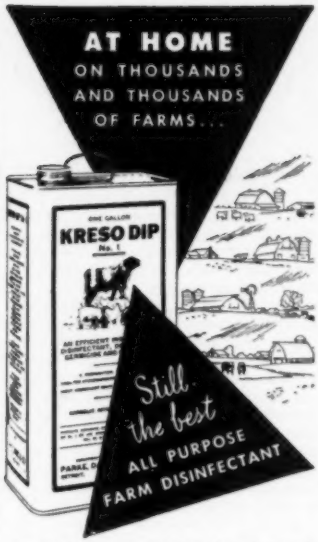

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PARKE, DAVIS & CO.
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DRUG STORES SELL PARKE-DAVIS PRODUCTS

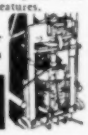
Get help with your decorating problems

The leading stores listed on page 101 are cooperating with *Successful Farming* to offer you advice and assistance with all your farm home building and decorating problems. Turn to page 75 right now, and learn the name of the store nearest you. And be sure to stop in, your next trip to town.

Continental POST-HOLE DIGGER and WIRE WINDER-UNWINDER

An unbeatable team that will save the work of 20 men. Digger penetrates hardest soil. Winder-Unwinder attached in 2 minutes. Winds or unwinds 50 rods per minute. No other can compare. Five patented features.

SAVES WORK OF 30 MEN



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CONTINENTAL BELTON CO.
BELTON 6, TEXAS

Vitamin treatment for shy breeders. There is also evidence to indicate that vitamin shortages may affect reproduction, particularly in cattle. We recall the case of a valuable old Guernsey cow that had been repeatedly bred without being "settled." Examination showed her to be physically normal and sexually healthy.

As a sort of last resort, we treated her with both Vitamin C and Vitamin A in conjunction with other measures. She settled to the next service.

Maybe she would have conceived without vitamins. We are uncertain as to just how much good they really do. We frequently get good results by using vitamins on "shy breeding" cows. However, we have our failures, too, and know vitamins are not infallibly efficient. The best we can do is to suspect that vitamins and breeding efficiency are frequently tied together in some way.

Lack of iodine means trouble. Not so long ago we thought iodine deficiencies occurred only in parts of Canada, the Northwestern states, and the Great Lakes region. Nowadays we aren't so sure that other areas aren't involved, too. Young animals are the ones that really suffer.

We recently examined a litter of pigs that had been born dead. Though carried full term, most of them were hairless. Some pigs in another litter had been born alive, but so weak that they soon died. Opening up some of the dead youngsters showed their thyroid glands to be like clots of blood. It was an unmistakable example of iodine deficiency, even though the sows had been given free access to iodized salt. Things happen that way sometimes, so the protective powers of iodine can't be entirely trusted.

Every once in a while we are called to see a calf that has been born exceptionally weak. Sometimes such animals are easily seen as having "big neck." At other times the weakness is a sole symptom. Calves are not generally born hairless like pigs, but we routinely suspect every weak calf born in our part of Wisconsin as being a sufferer from iodine deficiency in the dam's ration.

Maybe in time we shall become equally suspicious of other possible deficiencies that cause hidden hunger. END

More air for pigs

Ventilators in both ends of this modified A-type hog house help keep hogs comfortable on the farm of Bernard Decker, Monroe County, Missouri. This house also has a door in the roof which aids in cleaning the structure.—*H. M. Dail.*

Protect the PROFIT POINT

To safeguard against loss of quarters, treat all teat injuries promptly. For Sore Teats, Scab Teats, Teats that have been stepped on, Cut or Bruised, USE

Dr. Naylor's MEDICATED
Teat Dilators

CONTAIN SULFATHIAZOLE—Dr. Naylor Dilators act as medicated surgical dressings to the teat canal. The medication is IN the Dilators. They help combat infection and relieve tension by applying sustained antiseptic contact directly at site of trouble.

EASY TO USE—fit large or small teats.

Large Pkg. $1.00 45 Dilators
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Give your crops plenty of moisture—from wells, lake, or stream. Get bigger yields—more No. 1 grades. Use OK Champion Portable Irrigation. Light weight—ALUMINUM or STEEL pipe. Easily moved. Improved, quick connecting, flexible couplings. Two men easily move and reconnect ½ mile pipe in thirty minutes. *Send for FREE Circular and Data Sheet for specifications.*

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Portable Irrigation

Tried repairing fences when you feel like this?

MENDING fences after a hard winter is miserable work on a day you wake up with a headache . . . feeling dull and logy . . . because you need a laxative.

So always be sure to keep Sal Hepatica—the laxative that suits your convenience—handy.

Taken before breakfast, sparkling Sal Hepatica brings you *speedy, gentle* relief—usually within an hour!

At the same time, antacid Sal Hepatica also sweetens a sour stomach by counteracting excess gastric acidity.

Sal Hepatica is a recommended laxative by *more than half* the physicians interviewed in a national survey!

SAL HEPATICA
The Antacid Laxative

A PRODUCT OF BRISTOL-MYERS

Home Planning Help
There's a store near you offering **Successful Farming's** home planning service. See page 75 for more about this service.

FIRST the DRAG SCRAPER
THEN the CARRY-ALL
NOW

THE MILLER ROTARY SCRAPER

Loads while it scrapes with rotary clearing blades. No loading pressure makes 3½ cu. yards scraping possible with small wheel tractors. Fully hydraulic, performance guaranteed. Slash your leveling costs now.

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All Purpose Stalk Cutter

ROTOCYCLE is the economical method of cutting and shredding all stalks. Cuts row crops, broadcast, pasture land, and tops legumes, on flat or bedded areas. Whirling action cuts and shreds dry or green stalks for faster, more complete decomposition. Kills harmful insects such as Pink Boll Worm, and Corn Borer—Destroys hatching places for next year's crop. Tractor drawn and powered, it's the most useful implement on the farm.

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Easy and Cheap to Operate

SAVE TIME, WORK, MONEY!
SHAW "DU-ALL" and "PEPPY PAL" TRACTORS

PLOW

These rugged walking or riding tractors are ideal for farm, truck garden, orchard, poultry farm. Operate on a few cents an hour. A child can handle them.

DO DOZENS OF JOBS Both riding and walking tractors quickly and easily plow, cultivate, harrow, disk, bulldoze, spray, haul, grind, saw wood, etc.

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RIDING TRACTORS Four models from 5 to 12½ H. P., 58 in. wheelbase, 36 to 52 in. wide, 24 in. plant clearance. Hand or electric starter. Walking Tractors 1½ to 5 H.P.

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Veterinary

Look for inverted nipples

THE OTHER DAY we saw a sow with her first litter of 12 husky pigs. She was quiet and had been splendidly cared for throughout pregnancy. Her 14 breasts were full of milk, yet her family showed signs of being hungry.

This was not surprising, as a close look showed that only six of the breasts were equipped with nipples! The others ended abruptly in thumb-size lumps instead of approved eating places for pigs. Further examination showed that the lumps were formed by complete turning-in of the nipple ends. These had then grown together so milk was prevented from coming through, so there were only half enough places at table for the 12 pigs. As a result, some went hungry.

Because the inverted nipples are believed to be an inherited characteristic, prevention is largely a matter of choosing the right kind of breeding stock. None should be saved from the litters of affected sows, of course. For further protection, all gilts should be inspected before deciding whether or not they are to be "saved out."

Got a mangy dog?

WHEN FIDO gets the mange, his trouble may come from two different types of mites known as sarcoptes and demodex. Sarcoptic mange usually is shown by the development of a thickened skin covered with scabs and crusts. Itching is marked and continuous. The face, head, and limbs are most usual sites.

Dogs suffering from demodectic mange usually show signs of a mild irritation. Bluish discoloration of skin usually is present. Secondary bacterial invaders may complicate the condition. These parasites show a preference for areas about the face, head, neck, legs, and feet.

Local treatment usually consists of an acaricide such as gammexane and benzyl benzoate, canex, odylen, chaulmoogra oil, sulfur and tar, and ultraviolet light.

Dormant erysipelas

NOT LONG AGO we made several trips to a farm where the expected crop of pigs was arriving. However, the maternity cases were only indirectly responsible for our calls. This was because we were fighting erysipelas, which had waited until farrowing time before appearing in the hog house.

Erysipelas is noted for breaking loose when predisposing factors are just right. It may be unknown on a farm for a long time and then suddenly appear after something like weaning, castration, vaccination, a switch in feeds, or even a marked change in the weather.

You can guard against some of these weakening factors and others you can't, but you can always be alert for signs of trouble, anyway.

When cows give bloody milk

OCCASIONALLY we see cows that are giving bloody milk out of one or more quarters. In most of these cases, trouble is due to the bursting of delicate blood vessels inside the udders. Sometimes an

injury from a fall, a kick, or "hooking" from another cow is to blame.

Bloody milk at freshening time usually means that the vessels have been broken by severe swelling of the udder. The best treatment for the trouble consists of good management practices. Try doing these three things:

1. Milk affected cows every two or three hours until milk is again a natural white color. This probably will take several days.
2. Bathe and massage the udder with cold water after every milking during this period.
3. Cut down sharply on the grain ration for as long as the milk remains even slightly red.

Bang's and boars

We recently visited a farm noted for good hogs. Things were different this year, though, for none of the baby pigs was saved. Some were born ahead of time and others were carried full term.

All of the aborted pigs were dead, and about half of those that came after a normal gestation period were also born dead. Even those that were born alive were weak and sickly, though, and soon died.

In searching around for an explanation, we discovered that the pigs were all sired by one old boar. This animal had been purchased for the previous breeding season after hitches on several neighboring farms during preceding years.

Testing for Bang's disease showed the boar to be a reactor as well as several of the sows bred to him. His breeding history, coupled with the absence of previous trouble on the farm, was enough to convict the boar. He was judged guilty of introducing infection that made him a pretty expensive purchase, even at a bargain price.

All of which serves as a reminder that swine intended for breeding purposes should be tested for Bang's disease before they are brought to the home farm.

Helpful reminders

Five-percent sulfathiazole in a base of cold cream is a good treatment for pox or external teat infections of dairy cows.

•

The germ of anthrax has been known to survive in the spore stage for more than 50 years. Farms once contaminated with this fatal and contagious microbe can be considered as permanently infected. END

"give 'em Semi-Solid, son"

Many a father has looked at his son's pigs around weaning time or just after a spell of bad weather and said, "Better give them a little Semi-Solid, son."

It's the old story of experienced hog raisers knowing the value of extra nutrition during critical feeding periods.

But why feed Semi-Solid Emulsions only during special periods? Consider such records as: $9.93 feed cost per cwt. of gain (1949); eight pigs per litter marketed; 200 pound pigs marketed in less than 6 months. These reports are from farms that "Give 'em Semi-Solid" every day, all the way.

So right now begin feeding SOW Emulsion to sows, boars and suckling pigs . . . PIG Emulsion to market hogs. Both come in low-cost,100 pound drums or larger barrels.

FREE: Book on hog raising ideas. Drop card to Consolidated Products Co., Dept. S4, Danville, Illinois

"The Semi-Solid System" OF RAISING HOGS

jari IS YOUR FARM'S BEST FRIEND!

Keeps weeds down in fence rows, orchards, mows lawns. Slashes thru thickest underbrush with super-rigid specially designed knife. Cuts six acres of forage a day. Easy to handle . . . your youngster can run it.

HERE'S GOOD NEWS
New Power Spray Attachment kills weeds on lawns, crops, destroys fruit pests. Even sprays water paints. See your dealer or write for details.

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Your Old Model John Deere A or B or Farmall F-20, F-30 and Regular Model

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Go 9 and 15 m.p.h. on your old model John Deere A or B. Two separate, additional speeds. On Farmall F-20, F-30, or Regular Model, you can do 14 to 15 m.p.h.; or if you prefer, you can have 10 m.p.h. gear box for the F-20 or Regular Model. Installed with or without Lift-All Pump.

Bring your old tractor up to date. Do many more jobs in a day. Ideal for bucking hay, rotary hoes, long hauls, etc. Does not interfere with present gears.

Also Gear Box for Farmall H or M Adds Useful Middle Gear

Equip your H or M with this handy in-between speed of 10 m.p.h. Not too fast, not too slow for many field jobs. If you prefer, you can have 7 m.p.h. gear box. Quickly, easily installed.

Write today for full particulars. Be sure to name tractor you are interested in.

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PERFORMANCE
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ON SHALLOW WELLS
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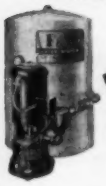
Delivers 40-70% More Water



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CENTRIFUGAL JET PUMPS
Give CERTIFIED Top Performance

Whatever your well depth there's a new F&W water system to give you all the water you want for farm and home—plus extra for emergencies. All F&W water systems—both centrifugal and piston types—have farm-proved dependability and the backing of Flint & Walling's 84 years' experience. F&W's are clean and quiet! And even the compact "package units" that will go under your sink can pump over 630 gallons per hour. Get details on new F&W's and data on choosing right water system.

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"RUNNING WATER FOR RURAL HOMES"

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Send by return mail your new edition of "Running Water for Rural Homes."

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Whether you are planning to build a new home, add an extra room, modernize your water system, or insulate your ceilings and walls, Successful Farming's Building Book helps you do the job right and save money and time in the bargain. See page 198.

HE OWNS A GOOD-PAYING BUSINESS
SO CAN YOU

"Made $50 many a day," he says. Free illustrated booklet tells of many others. Make good money, **be your own boss** grinding feed for local farmers. Big demand for custom grinding. Business grows and grows.

GEHL Direct-Drive PORTABLE MILLS pay for themselves out of profits. Terms to responsible parties. Two models . . . powered by special motor, Diesel or Gasoline (illustrated) or by truck motor. Sturdy construction . . . big capacity . . . economical to operate. Write for complete details.

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Dept. PD-500 West Bend, Wisconsin

APRIL POULTRY POINTERS

Chick season in high gear

By this time, many of you have your chicks somewhere along the route toward making them profit producers. But, right now, it's all outgo, and no income. Anything you can do to cut down costs and still get the brooding job done is all to the good. Maybe a few of the following tricks and ideas will contribute toward that goal.

Keeps chicks from drowning. R. K. Hailey, Newton County, Missouri, in years past has used quart waterers when starting baby chicks. Recently he has switched to a 3-gallon waterer.

These large waterers save labor, keep water before the chicks, and in general work very well. But occasionally a chick gets into the water and drowns.

Mr. Hailey reports that a piece of ½" diameter cable wrapped around the waterer reduces the size of the opening where the chicks drink, and thus eliminates drowned chicks.

How much chicks drink. And, while on this subject of water, do you know how much your chicks drink in a day's time? If not, this may give you an idea.

At 1 week of age, 100 chicks consume 1 gallon per day. Then for the next three weeks they will drink approximately 2 gallons daily. At 6 and 7 weeks, the 100 chicks will drink 3 gallons; at 10 weeks, 4 gallons; and over 12 weeks, 5 gallons.

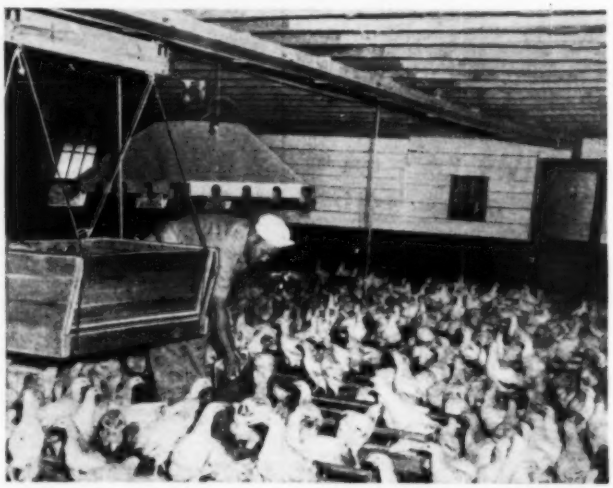
Well fixed for feeder space? Here are some recommendations by Iowa State College on the amount of feeder space actually needed by chicks. From 1 to 4 weeks of age, three 2′ feeders will do. They'll need two 4′ feeders between 4 and 8 weeks of age, and three 4′ feeders between 8 and 24 weeks of age.

Do cockerel chicks make money? Are you one of these poultry raisers who has observed that cockerel chicks, when sold as broilers, don't make the return over feed costs that they once did?

There's a reason for this. Specialized broiler producers have sprung up in many areas of the country. They raise broilers by the thousand—as many as 20,000 to 30,000 per man in a single brood. They produce birds of uniform quality, weighing 3 to 4 pounds, in 12 to 14 weeks. City buyers like them.

Better disease control methods, better feed, better chicks, and efficient management have enabled these growers to expand their production. Growing large numbers of birds, they are able to operate on a small profit per bird produced. Such producers now supply much of the poultry meat that formerly came from farm flocks. For these specialized producers, feed, chicks, labor, and housing constitute the greatest part of their total cost.

Even with these large broods of birds, good broiler raisers have very low mortality. For instance, Alexander Gordeuk, Purdue University poultry extension specialist, cites an Indiana producer, James Devault, who marketed one brood of

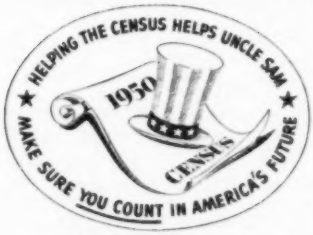


Feeding 4,000 broilers now is only a matter of minutes, instead of a 2-hour job, for Robert Key, Crawford County, Missouri. He and his partner, Edward O. Dam, push this carrier, holding 400 pounds, along the overhead track the full length of the 94′ house. Track extends through a door into the feed room.—O. D., Missouri

IT WILL PAY YOU to order yours today from your local dealer or write direct to factory.

Pax STEEL PRODUCTS, INC. COLDWATER, OHIO

What to Do When the Census-taker Comes



he'll be at your house sometime after April 1

1. Ask him to show his official card. This identifies him as an employee of the Census Bureau.
2. Be friendly. Invite him in. He will stay only a few minutes.
3. In non-English speaking homes, have an adult or older child ready to translate.
4. Answer all questions accurately and honestly. Remember the information you give is strictly confidential. Under law, it is not available to any individual or any other government agency.

Like other American business firms, we believe that business has a responsibility to contribute to the public welfare. That's why this advertisement is sponsored by SUCCESSFUL FARMING.

10,000 broilers last December at 14 weeks of age. His total death loss from start to finish was only 2 percent.

More about built-up litter. It sounds like too much to believe, but it's true that baby chicks at the Ohio Experiment Station were raised indoors successfully on built-up litter that had been used for three years by hens. That certainly was never our idea, but experiments are beginning to show that built-up litter actually is cleaner than new litter contaminated with fresh droppings. What happens in properly handled built-up litter is similar to what goes on within a compost heap. It's a case of chemical and biological activity destroying whatever is harmful in the droppings.

That's why they are finding that chicks raised on built-up litter have less trouble with coccidiosis. For one thing, the chicks may get a light dose of infective material which will build up immunity. Second, the ammonia in the built-up litter seems a good place for development of parasites which attack the coccidiosis organisms. Third, the ammonia fumes in built-up litter tend to discourage or destroy the coccidia.

Then there's the nutritional side to this built-up litter system. It's beginning to look as if chicks and growing pullets raised on built-up litter and fed an all-plant ration can do just as well as similar chicks raised on either built-up or frequently changed litter and fed a diet containing such animal proteins as meat scraps and dried whey. The conclusion is that the built-up litter supplies a nutritional factor that compensates for an otherwise inadequate diet.

One thing to remember—built-up litter isn't the same thing as plain old litter that's never changed and nothing added. Built-up litter, as explained in previous issues, must be handled properly, with fresh litter layers added on top of the old from time to time. It does require that much attention.

New way to save labor. You may not agree, but we're giving you the laborsaving experience of Dick Cole, Dakota County, Minnesota, in handling pullets in the laying house.

"It's the darndest thing I ever saw," said Cole, "but there it is. When night comes, those pullets just squat on the floor of the laying house and sleep. They have no perches to roost on, but that makes no difference. They are getting along fine and are in dandy condition."

[*Turn to page 192*

SUCCESSFUL FARMING

"Contour plowing, my eye! I know a snoozing man when I see one!"

Low-Cost Pullorum Control

DR. SALSBURY'S **Sulfa**

Reduces Chick Loss
Also Controls Intestinal Coccidiosis

For Pullorum—Dr. Salsbury's Sulfa gives fast-acting control. Reduces immediate mortality. Costs less than 1c per bird. Give in mash for first 7 to 10 days of chicks' lives.

For Intestinal Coccidiosis—Gives fast... effective control for both chickens and turkeys. Reduces death and stunting loss. Give for 3 to 5 days at first signs of outbreak. Buy Dr. Salsbury's Sulfa at hatchery, drug or feed store.

Relieves Nasal Congestion of poultry

DR. SALSBURY'S **Can-Pho-Sal**

Inhalant for Poultry

Loosens Mucus and Phlegm...Easily Used As Spray, Inhalant or Nasal Wash

Stuffy, congested nostrils may throw birds out of production. Help them breathe easier by using Can-Pho-Sal. Popular with thousands of commercial growers. Buy at hatchery, drug or feed store. Dr. Salsbury's Laboratories, Charles City, Iowa.

When you need poultry medicines, ask for

Dr. SALSBURY'S

ever hear a chicken's gizzard grinding?

GROWING-SIZE STONEMO HARD GRIT MAGNIFIED 70 TIMES

You can actually hear a chicken's gizzard at work—grinding feed. In fact, the amount of feed your birds use—how much it costs per pound of growth—depends on what's in the gizzard and how well it grinds.

That's why cost minded poultrymen and farmers always give their birds STONEMO Hard Granite Grit. It helps birds make greater use of valuable nutrients—helps them to better growth and production.

It's the tough, sharp cutting, extra grinding surfaces on STONEMO that grind feed finely—make it more available. STONEMO is Hard Granite Grit—will not dissolve in the bird's gizzard—will not upset the mineral balance of the ration.

You, too, like thousands of poultrymen and farmers, will want to increase your egg and meat profits through reduced feed costs. Include STONEMO Hard Granite Grit in your feeding program.

STONEMO is now packaged in two sizes, the new 10-lb. Hopper-Pak self-feeder and the economy 80-lb. red, white and blue bag. Get either or both from your feed or poultry supply dealer!

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STONE MOUNTAIN GRIT COMPANY
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STONEMO

Chick season

[*From page 191*]

Last fall Cole had more than his regular house would handle. So he put the extras into a small house by themselves.

"The state experiment station fellows in St. Paul were telling me about the new idea of not using roosts," Cole reported. "Of course, if you don't have roosts, you don't have a droppings pit, either, and, therefore, never have to clean it. I wanted to try this in a small way before sticking my neck clear out with the whole flock. The surplus birds last fall gave me a chance.

"You must use built-up litter before you can attempt to go without roosts. I don't think hens would do well sitting on the bare floor, but deep litter insulates the floor, it generates heat within itself (which gives the hens a warm bed), and it absorbs droppings. You have to make certain the hens don't get into the habit of roosting on the nests and in them.

"Several flockowners in Minnesota are trying this both with heavy breeds and light breeds. Look at the labor saved. It is something to think about when equipping a new poultry laying house."

How much feed per dozen eggs? Are you confused by the various figures given as to the number of pounds of feed needed to produce a dozen eggs? Figures are quoted varying from 4 to 8 pounds of feed per dozen eggs.

The U. S. Department of Agriculture presents figures showing the amount of feed eaten by layers at various levels of egg production. If your birds average 100 eggs per year, they will eat 8.7 pounds of feed per dozen eggs. If laying 200 eggs, 4.9 pounds; if 300 eggs, 3.5 pounds of feed per dozen eggs.

Poultry manure good on gardens. J. R. Hepler, University of New Hampshire, points out that the common recommendation in the use of hen manure is as follows:

"Apply and turn under hen manure up to 10 or 15 tons per acre, or twice that quantity of stable manure. In addition, use at least 1,000 pounds of superphosphate per acre, or perhaps an application of 750 pounds of a fertilizer high in phosphorus like a 4-12-4."

Hepler points out that these recommendations fit almost any situation. The amounts will not hurt any garden and will help increase the crop a great deal over the average garden.

Considering the fact that 100 hens will produce approximately 4 tons of manure a year, it is easy to calculate that the average farm flock produces just about the proper amount of manure to be applied to the average home garden. **END**

SUCCESSFUL FARMING

These roosts make for

easier hen house cleaning

By C. L. Stratton

Having trouble driving your pullets onto the roosts when first housed? Are your roosts bulky and hard to handle when it's necessary to clean out the droppings? You can do away with roost problems easily.

A good time to remodel roosts is right after the hen house floors have been cleaned and just before the pullets are housed. All old droppings boards and roosts should be carefully taken out. Don't destroy the boards and braces. Four feet is a good width for the new roost sections. Make the length short enough to handle easily.

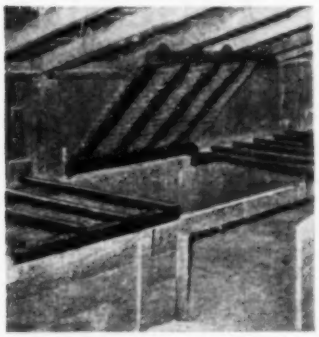
On the rear wall, nail a 2"x6" board, 20" above the floor, to form the rear support for the roosts. Measure out 4' from the rear wall and place a 2"x6" beam for the front roost support. Nail notched boards against the wall at each end to hold this support. Fasten a 2x4 or 2x6 in the middle of this beam to act as a stud. Make sure the top surface of the beam is not over 20" above the floor. A brace should run from this stud to another short stud nailed against the rear of the pen.

The roosts themselves are easily made from the leftover 2x4's. After figuring the measurements according to width of pen and number of roosts desired, cut the 2x4's for the frame of the roosts. Allow a space between the roosts to prevent binding.

Tack turkey wire on the 2x4's. Now nail 2x2's, 4' long, on the top of this frame. The 2x2's should be about 1' apart. Lay the finished roosts on the two supports erected earlier, and make two sideboards for the front of the roost.

Nail wooden blocks on the rear wall just above the end of each roost section. Screw a 1" eye hook into each block. Now screw a sturdy hook into the roost. The hooks serve as hinges.

Pullets will fly onto these low roosts easily after the first night's training. The roosts make cleaning an easier job and are inexpensive to build.



Roosts can be raised and hooked to ceiling. Sideboard is shown open for cleaning

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"So fine for muscle soreness I even keep a bottle in the barn!"

says PAUL D. ANGSTADT
Sinking Spring, Pa.

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Next time your overworked muscles shout with pain, rub on time-proved Absorbine Jr. and *clock* how fast the pain eases! Get Absorbine Jr. wherever drugs are sold . . . $1.25 a bottle . . . Introductory Size 15¢.

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Absorbine Jr.

Dairy

Keeps cow out of gutter

A PIECE of twine from a bale of hay is used by Howard Davis, Union City, Pennsylvania, to keep cows from stepping in the gutter. The twine is fastened from the bottom of the stanchion back to the hind leg, where it is tied below the dewclaw. Davis puts it on the side opposite from where the cow is milked.—*V. S., Pennsylvania.*

Rye pasture while barn-feeding

TURNING COWS onto rye pasture in late fall and early spring makes them healthier and produces some extra feed, according to tests at the Ohio Agricultural Experiment Station. The disadvantages are the possibility of tramping soft ground and the irregularity of feeding and management that might result from turning cows onto pasture some days and not the others.

Half the pasture field in this experiment was sown to Balbo and the other half to common rye. This extra grazing during the barn-feeding period induced a 32- to 33-percent increase in the Vitamin A of milk, while cows not on pasture were showing a 17- to 20-percent loss. The extra Vitamin A found in the rye pasture must be credited with having a health value, as part of it probably is retained for bodily needs.

From the feed value standpoint, the extra grazing on rye pasture during the barn-feeding period was estimated at $29.60 per acre for fall grazing, and somewhat more in the spring.

Less grain, more income

YOU STAND a good chance of lowering profits if you feed dairy cows more grain than they need. One dairyman in Shelby County, Illinois, earned $57.35 more in one month from nine cows simply by cutting the grain ration.

In September, this man was feeding 1 pound of grain for every 1½ pounds of milk produced. Almost any dairyman will admit that's going pretty strong on the grain. For the one day his cows were tested, they gave 353 pounds of milk.

Using a suggestion made by his dairy herd tester, this Illinois farmer fed only half as much grain—1 pound for every 3 pounds of milk produced. The following month, October, these same cows averaged 380 pounds of milk.

Net result of this change amounted to this: He used 109 pounds less of grain per day but got 27 pounds more milk per cow. And, during October, he made an extra income totaling $57.35.

Revaccination question

FOR SOME YEARS a riddle without satisfactory solution, the problem of revaccinating cattle, is being studied at the University of Wisconsin. Starting with 62 heifers about 8 months old, all were vaccinated at this age with Strain 19 vaccine and then divided into three groups. One group was not vaccinated again, the second was vaccinated at 14 months, and the third at 20 months.

So far, the vaccinations have had no undesirable effects on calvings, even for heifers vaccinated during the third month of pregnancy. The second vaccination titer has disappeared more quickly than

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the first, in most cases. Revaccination has not seemed to produce any great number of persistent reactors, although this practice did make most of the cows fall into the "suspect" class.

This experiment will carry through three calvings to see the effect of these vaccinations and whether the animals will resist Bang's exposure during the third pregnancy.

Get them on grass

YOUNG CALVES can benefit from good pasture much earlier than many farmers suspect. This conclusion has been reached by workers at the Ohio Agricultural Experiment Station.

Dairy calves as young as 4 days old were tethered on a lawn-type bluegrass and white clover pasture, in addition to receiving milk. They were compared with others which received pasture, grain, and milk; also with some maintained in the barn on milk, clover-timothy hay, and a 14-percent simple grain mixture.

All calves receiving pasture had much higher blood carotenoids (forerunners of Vitamin A) as well as a higher content of Vitamin A in the blood than did the barn-fed animals. The calves receiving grain in addition to pasture gained more rapidly than those getting pasture and milk only, but both groups grew satisfactorily and were in healthy condition. —*F. N. A., Indiana.*

Something new for ration

HYDROL, a by-product from the processing of corn sugar, can be used successfully in dairy rations, according to recent tests at Iowa State College. When mixed with corn by-products and added to a regular basic dairy mix (400 pounds ground corn, 400 crushed oats, and 200 soybean meal), it gave as good results as a ration made up entirely of the basic mix.

Tough on cheese making

PENICILLIN and other antibiotics are fine for treating cows with mastitis, but keep on the farm the first four milkings after treating the udders. The fifth milking should be the first to go out in the market milk.

Such is the caution put out by the dairy department at the University of Idaho. Reason for this caution is difficulty which cheese makers have with milkings immediately after udder treatment with penicillin, streptomycin, and similar products. The drug kills the organisms which are necessary in cheese making, resulting in completely dead vats, or slow-to-make, or poor-quality cheese.—*O. A. F., Idaho.*

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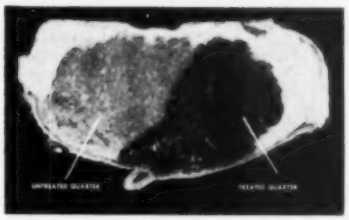
"The next time he'll know the difference between a worm and a rubber band."

Today's most widely accepted treatment for mastitis*!

SQUIBB "INSTANT-USE" PENICILLIN

EASY TO USE! Simply unscrew cap, insert tip of Squibb Penicillin Ointment tube into teat, squeeze out ointment, massage upward into quarter. That's all!



EFFECTIVE! A simple experiment, results of which are shown in this unretouched photograph of a detached udder frozen for cross-sectioning, demonstrates how thoroughly Squibb Ointment disperses penicillin throughout a treated quarter of a cow's udder.

● **Widely accepted** because it is a completely proved product. More than *one million* cases of mastitis* have been successfully treated with Squibb "Instant-Use" Penicillin. Penicillin is the "product of choice" of veterinarians and farmers.

● **Widely accepted** because only one tube is required for many cases. Once injected, Squibb Penicillin Ointment continues its effective action even after several milkings.

● **Widely accepted** because penicillin ointment is the most economical of all mastitis* treatments. Squibb "Instant-Use" Penicillin Ointment costs you up to 66% less than other types of treatment.

● **Widely accepted** because it's a clear ointment, and won't discolor milk.

Dairymen, who keep Squibb "Instant-Use" Penicillin always on hand in the barn, treat mastitis at the first sign—stop its spread—save themselves many dollars! Ask your druggist for it by name. He has it, or can get it for you.

For SCOURS in calves and other young animals—PENOVOXIL CAPSULES. A specially prepared, exclusive Squibb formula—only product of its kind on market. Effective—easy to use—no drenches—no injections. If your druggist isn't supplied, write to E. R. Squibb & Sons, Veterinary and Animal Feeding Products Division, Dept. SF-4, 745 Fifth Avenue, New York. Literature on Penovoxil Capsules, and other Squibb specialties available on request.

*Due to *Streptococcus agalactiae*, the cause of the largest percentage of all mastitis cases.

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A typical Hoover capacitor-start motor for hard-starting, continuous-duty applications. Split-phase and polyphase motors are also available.

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Livestock

Raises more pigs with less work

PIGS are produced with a minimum of labor on the 160-acre farm of Joe Landherr in Mower County, Minnesota. His gilts formerly farrowed in February and March, but Landherr figured he lost too many little pigs because of the cold. He also disliked the work of preparing the pens for winter farrowing and staying up nights at pigging time.

So he switched to a system whereby the gilts farrow in warm weather under the shade of a tree. He and his sons have a partly wooded, 26-acre permanent hog pasture where their gilts farrow in June and July.

"This way," he points out, "there is plenty of room for farrowing and no need of staying up nights with the gilts."

A large barn has been prepared for the use of the pigs. Self-feeders have been placed there together with a creep for the little pigs. The self-feeders are filled with shelled corn, tankage, and mineral. During the winter months alfalfa hay is fed.

Mr. Landherr figures his summer-farrowed pigs are stronger and sturdier than those born in February and March. (Last year, 29 gilts weaned 248 pigs, an average of more than 8.5 to the litter.) Furthermore, the June and July pigs come at the right time to do a good job of gleaning fallen corn. He says he lost very little corn despite the windstorm of last October.

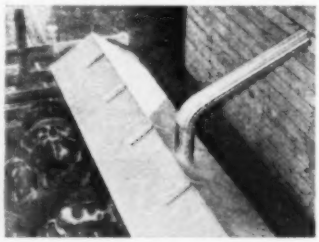
To make sure that he is getting the strongest kind of breeding, Mr. Landherr uses three purebred boars of three different breeds. Gilts from the best litters are marked to enable the Landherrs to use them for breeding purposes.—*H. S., Minnesota.*

Lets gravity feed his hogs

WALTER BODY got tired of carrying feed to the hogs, so he rigged up this gravity-fed self-feeder on his farm in Sac County, Iowa. A self-feeder was made and connected to the corncrib with a piece of 6" galvanized pipe. The concrete feeding floor is conveniently located between the corncrib and the hog house.

Now, the corn is never handled by hand. The ear corn is gravity-fed into the sheller, shelled, and run into the elevator which takes it up into the bin. Then, the corn is gravity-fed down through the galvanized pipe into the feeder. When the feeder is full, it automatically stops the flow of corn.

An arrangement of this type can be had with very little cost on any farm where the feeding floor is located near the corncrib. With the use of this auto-



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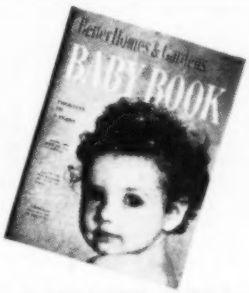

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matic feeder, automatic waterers, feeding floors, clean ground, good sanitation practices, and balanced rations, hog raising on the Walter Body farm has been a profitable enterprise.—*R. L. S., Iowa.*

Pasture cuts feed needs

"THE USE of pasture and about three months' more time than is needed in a dry lot feeding program will save at least 7 bushels of corn per head in producing marketable yearling steers," says H. G. Russell, extension animal husbandman at the University of Illinois.

To show the heavy feed requirement of steer calves in straight dry lot feeding, six trials at the Illinois station revealed that an average of 44.5 bushels of corn, 350 pounds of protein supplement, and 1,148 pounds of legume hay per head was needed for calves fattening in dry lot. All of these feeds have been relatively high in price.

On the other hand, beef calves that have been wintered economically to gain approximately 1.25 pounds per head daily during that period can be pastured to advantage from about May 1 to August 1. On good rotation pasture without grain, they will gain about 1.5 pounds per head daily. By this time they should average around 750 pounds per head in weight and be ready for a 100-day finishing period of grain and supplement on pasture.

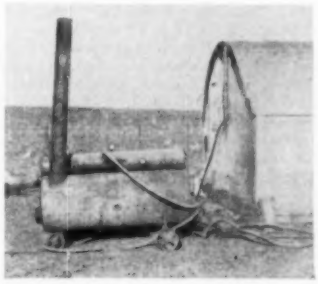
In Illinois tests, a ration of 15 pounds of shelled corn and 2 pounds of supplement has produced average daily gains of 2 pounds per head on cattle handled in this manner. This holds down the feed requirement for producing reasonably well-finished yearling steers to around 1,500 pounds of corn and 200 pounds of supplement per head. That's quite a saving in feed at the expense of only about three months' extra time.—*T. H. B., Maryland.*

What margin in lamb feeding?

WITH FEEDER lambs selling for 50 cents to $1.50 per hundredweight higher than fat lambs, could this be the year that lamb feeders will lose their shirts?

Maybe so, but possibly not. It is naturally the hope of every lamb feeder that the finished lambs will sell from $1 to $3 more per hundredweight than he paid for them as feeders. But, contrary to what inexperienced lamb feeders are often told, there is no such thing as a fixed margin of $1 or $3 needed to break

[*Turn to page 198*



Cheap, yet effective, is this way of cleaning poultry and hog houses on Robert Judd's farm, Wright County, Iowa. This old-style furnace is commonly used by implement dealers for cleaning tractors. Gauge is set at low pressure for steam bath.—F. K., Iowa

Use this one fly spray

on the cows

and in barns

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USE it on milk cows *and* in dairy barns and milk rooms. Safe on young stock and stock to be slaughtered. Safest long-lasting insect killer yet discovered.

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LONG-LASTING—One spraying normally is effective for several weeks.

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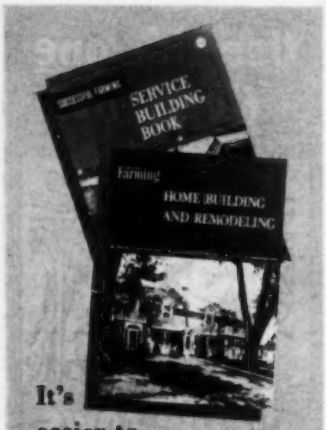

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Livestock

[*From page 197*]

even. The needed margin varies, often considerably. This is largely a result of existing price levels for lambs and for feed.

The experienced feeder realizes that he may sell his fat lambs for less per hundredweight than the feeders cost him, and hence is operating without a margin. Still he goes ahead. The reason is that he expects to sell the gain he puts on the lamb for enough more than it cost him to make the entire venture profitable. This profit from gain must cover the feed cost of fattening, shrink, expense of buying and delivering, interest, death loss, labor, and cost of marketing.

Figures based on eight feeding trials indicate that putting 33 pounds of gain on a 62-pound lamb to make a 95-pound lamb requires 126 pounds of shelled corn and 111 pounds of alfalfa hay.

The feeder stands the shrink both to and from market, and he has to produce from one-fourth to one-third more pounds of gain than he sells. And shrink is not regained quite as quickly as some farmers may think.

How can lamb feeders pay more for the feeder lamb per hundredweight than they will receive for their fat lambs? As the purchase price of feeder lambs increases, the necessary selling price increases, but the necessary margin needed to break even decreases.

With shelled corn at $1.15 a bushel and alfalfa hay at $23 a ton, the necessary margin practically disappears when the price level of the purchased lamb reaches $22 a hundredweight; and at $24 a hundredweight the lamb can be sold for 46 cents below the purchase price and still break even.

When shelled corn is $1.05 a bushel and alfalfa hay $21 a ton, a 21-cent feeder lamb can be sold for 9 cents less per hundredweight ($20.91) and still break even. Anything above the necessary selling price is profit to the lamb feeder.—*R. M. J., South Dakota.*

Uses deep litter for pigs

You read and hear much about the advantages of deep litter for chickens. Now comes a Minnesota hog raiser, Wilfred Denisen of Mower County, who raises little pigs successfully on deep litter.

There's nothing fancy or elaborate about Denisen's hog house. His sows farrow in old horse stalls equipped with guardrails. They're bedded down in oats straw, and Denisen keeps adding to the straw, building up the litter until it's anywhere from 12 to 18 inches deep by the time the little pigs are ready to go out on alfalfa-brome pasture. His sows farrow in late February and the pigs see no sunshine until put out in the pasture late in April or early in May.

Denisen does all right, too. He raised 60 pigs from 6 sows last year and usually averages between 7½ and 8 pigs to the litter. He likes the deep litter idea because it means less work. He reduces the moisture problem by keeping the pigs liberally bedded with fresh straw.

"By keeping the little pigs indoors," he explains, "they're away from the old hoglot where they could pick up parasites so easily. They're kept indoors until 8 to 10 weeks old. They average from 40 to 45 pounds at the end of the 8 weeks, so you can see they come out of the barn in good shape."—*H. S., Minnesota.*

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West Bend, Wis.

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HOW I SAVED MY MARE

E. B. of Dry Fork, Virginia, writes, "My two-year-old work mare was lame with swellings on both hocks. Couldn't work her for 6 months. Tried everything, but nothing did good. Then I used SAVOSS. Now she is sound as any horse and works as hard."

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Troy Chemical Co., 110 E. 42nd St., New York 17, N. Y.

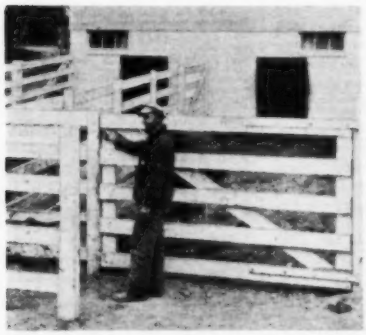
SAVOSS

He keeps his bulls at a distance

By Ken McDaniel

B. Snavely Garber, whose neighbor was killed by a herd sire, built this double pen on his farm in Lancaster County, Pennsylvania. Gathered ideas to made things safer, more convenient

To have spreader handy for easy cleaning of shed, he removes pins and swings gate to post in center partition. Pins inserted there to fasten. This keeps gate between himself and bull



When time comes to breed cow to the bull, Garber removes pins and lets gate swing against the post at left. No need to fasten gate to this post. Picture shows the two exercise yards for bulls and also the inside pens and barn in background

Chain arrangement in the foreground helps support cow while being bred. It's especially useful with heifers. Here again, Garber can keep something solid between himself and bull

Hoist raises bull pen doors. Made from base, reduction gearbox, and 1/4-hp motor from washing machine. Two harrow discs hold ropes on 3/4" shaft

This is one of the two doors, each weighing about 100 pounds, lifted by motor shown in picture at left. A V-belt on large V-pulley raises doors. To lower, Garber takes tension from belt by raising tightener. This permits use of doors when manure is at any level. Cost, about $9. **END**

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HOBART One of the world's largest builders of arc welders

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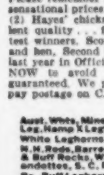

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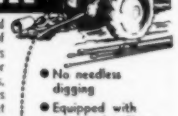

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Success in raising Baby Chicks depends largely upon proper care and management. Readers are warned to exercise every sanitary precaution and beware of infection in the drinking water. Baby Chicks must have a generous supply of pure water. Drinking vessels harbor germs. Drinking water often becomes infected with disease germs and may spread disease through your flock before you are aware. Use preventive methods—use Walko Tablets. For over forty years thousands of poultry raisers have depended upon them. You, too, can rely on Walko Tablets as a valuable antiseptic to aid in preventing the spread of disease through contaminated drinking water.

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(Advertisement)

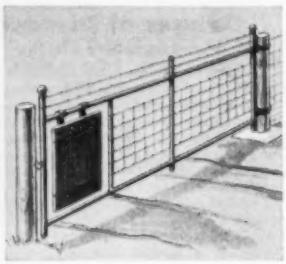
All around the farm®

A page written by our readers

When sorting and separating a lot of hogs, I use a paintbrush to put a spot of paint on the hips of the hogs I want to keep. When I get all the hogs marked that I want to save, I open the door through which the hogs generally leave the feeding floor. I can keep on the floor every hog that's marked. In this way I find it very easy to separate hogs, even when I have to do it alone.—*L. B., Iowa.*

I save old screening and, after sowing very fine garden seeds, I lay the screen over the soil. This breaks the force of raindrops and checks erosion and displacement of seeds.—*Mrs. W. S., Iowa.*

I designed this gate between my cowyard and hogyard, so the hogs can

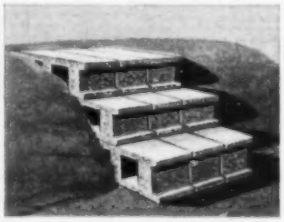


pass through and the cows cannot. The large gate can be opened as before. To install, I cut away part of the wire and welded in an extra pipe (see illustration), to which the wire is fastened. I then hung a swinging gate in this opening, through which the hogs pass.—*L. R., Minnesota.*

A 3-legged table of rugged construction with a vise bolted on top is handy for use on uneven floors. I use a table of this kind for welding and other purposes.—*F. B., Ohio.*

We have been able to cure hens of the egg-eating habit by soaking eggshells in pure turpentine for 10 minutes and then feeding the shells to the hens.—*N. R., Pennsylvania.*

On our farm we have found a low-cost and easy way to make steps in the back yard or hillside. I used ordinary



concrete blocks 16"x8"x8" and laid them the flat way, as shown in the drawing. I cut the dirt out of the slope so the blocks will stay put. Three blocks laid side by side make a short flight of steps 24" wide.—*L. J. H., Minnesota.*

I have found that old drinking cups which have been frost-cracked or damaged make fine holders for loose salt in calf and heifer pens. All you have to do is remove the valve control and clamp the cup to the pen or any vertical bar.—*S. J. P., Michigan.*

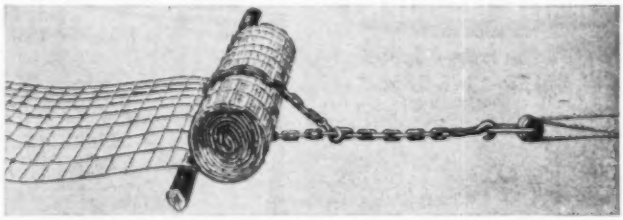
We often stretch woven wire without a clamp, when there is a part of the roll left over, by using a post and log chain, as shown in drawing. The post is laid crosswise under the wire just back of the remainder of the roll. The log chain is passed under the center of the roll, under the post, then up through the wire, and over the roll and hooked to the chain close to the ground.—*J. L. A., Iowa.*

To make the baiting of mousetraps more effective, I pass a narrow piece of cellophane tape around bait and bait pan, leaving it open enough on each side of the tape for a mouse to get the odor of the bait. The mouse has a hard time gnawing at the tape if it goes after the bait, and the trap is sure to snap. It can usually be reset without rebaiting.—*Mrs. H. E. E., Ohio.*

To prevent the harrow from injuring the bark of the trees when I am harrowing in the orchard, I cut an old tire in half and fastened one piece on each side of the harrow. This has worked very well in protecting the trees.—*E. B., North Dakota.*

For carrying an oilcan on my tractor or other machines, I cut a strip about 1" wide out of the side of a tin can. I then bolt this can anywhere on the tractor so that I can set the oilcan in it with the handle sticking out of the slot, as illustrated. Oiler can be reached easily when needed.—*E. L. B., Kansas.*

An old tube cake pan makes a good cat or dog feeder. Drive a stake through the center. The pan can be lifted for cleaning, but pets can't move it.—*Mrs. M. O. P., Indiana.*



Successful Farming will pay $5 for each item upon publication. You are invited to send us your ideas. We consider each one carefully, but regret we cannot return those not published.—*The Editors*

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VANILLA CREAM PIE

MAKE ONLY WITH GOLD MEDAL FLOUR

Make ..... **9-in. Pie Shell** ***(recipe at right)***

Mix in saucepan .... **⅔ cup sugar**, **½ tsp. salt**, **2½ tbsp. cornstarch**, **1 tbsp. GOLD MEDAL Flour**

Stir in gradually ..... **3 cups milk**

Cook over moderate heat, stirring constantly, until mixture thickens and boils. Boil 1 minute. Remove from heat.

Stir at least 1 cup of the hot mixture slowly into ..... **3 egg yolks, slightly beaten**

Then blend into hot mixture in saucepan. Boil 1 minute more, stirring constantly. Remove from heat.

Blend in ..... **1 tbsp. butter**, **1½ tsp. vanilla**

Cool, stirring occasionally. Pour into baked pie shell. Chill thoroughly. Finish with a whipped cream topping. Or spread Meringue (*recipe below*) lightly on pie filling . . . sealing it onto edge of crust to prevent shrinking. Swirl or pull up points to make it look decorative. Bake *8 to 10 minutes in moderately hot oven* (400°) until delicately browned. Let cool at room temperature away from drafts. Serve as soon as cool.

MERINGUE: Beat until frothy 3 egg whites, ¼ tsp. cream of tartar. Gradually beat in 6 tbsp. sugar. Continue beating until mixture is stiff and glossy.

BANANA CREAM PIE: Arrange a layer of sliced bananas ½-in. deep in the pie shell before pouring in the filling. (Use 3 large bananas.) Garnish whipped cream or meringue topping with a ring of banana slices.

ALMOND CREAM PIE: Use ½ tsp. almond extract for the vanilla. Add ½ cup toasted slivered blanched almonds to the cooled filling. Sprinkle a few toasted slivered almonds over the whipped cream or meringue topping.

CHOCOLATE CREAM PIE: Increase sugar to 1½ cups. Add 3 sq. cut-up unsweetened chocolate (3 oz.) with the milk.

COCONUT CREAM PIE: Fold in ¾ cup moist shredded coconut just before pouring filling into pie shell. Sprinkle whipped cream or meringue topping with ¼ cup shredded coconut (toasted if desired).

9-IN. PIE SHELL

Sift together *1 cup sifted GOLD MEDAL "Kitchen-tested" Enriched Flour,* *½ *tsp. salt.* Cut in with pastry blender or 2 knives ⅓ *cup shortening* . . . first cutting in half of it until mixture looks like "meal" . . . then cutting in the rest until particles are the size of giant peas. Sprinkle over mixture *2 tbsp. water* . . . mixing with fork to make dough stay together. Round up into ball. Roll out on lightly floured cloth-covered board 1½-in. larger than inverted 9-in. pie pan. Trim evenly. Place loosely in pie pan. Fold edge under or over to make stand-up collar. Prick thoroughly with fork to prevent puffing. Bake *8 to 10 minutes in very hot oven* (475°).

*If you use Gold Medal Self-Rising Flour (sold in parts of the South), omit salt in pastry only.

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